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OM nucleic - nucleic search, using sw model

Run on: August 5, 2004, 07:07:07 ; Search time 115 Seconds  
(without alignments)  
9685.099 Million cell updates/sec

Title: US-10-054-579-1

Perfect score: 2007

Sequence: 1 atgacatcgacggggaagga.....gaattatcccggaagtttaa 2007

Scoring table: IDENTITY\_NUC

Gapop 10.0, Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: Issued\_Patents\_NA:\*

- 1: /cgn2\_6/prodata/2/ina/5A\_COMB.seq:\*
- 2: /cgn2\_6/prodata/2/ina/5B\_COMB.seq:\*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2005.4	99.9	2908	US-09-930-181-1	Sequence 1, Appl1
2	1993	99.3	3364	US-09-930-181-3	Sequence 3, Appl1
3	225.4	11.2	1742	US-08-557-006C-38	Sequence 38, Appl1
4	225.4	11.2	2652	US-08-557-006C-39	Sequence 39, Appl1
5	225.4	11.2	2761	US-08-557-006C-24	Sequence 24, Appl1
6	214.6	10.7	3609	US-09-799-875-6	Sequence 6, Appl1
7	214.6	10.7	5983	US-09-799-875-4	Sequence 4, Appl1
8	213	10.6	213	US-09-930-181-5	Sequence 5, Appl1
9	213	10.6	1647	US-09-101-146-44	Sequence 44, Appl1
10	212.6	10.6	2175	US-08-984-890-1	Sequence 1, Appl1
11	200.4	10.0	1747	US-08-557-006C-44	Sequence 44, Appl1
12	191.4	9.5	1923	US-09-359-161-4	Sequence 4, Appl1
13	186.4	9.3	2902	US-09-579-664B-4	Sequence 4, Appl1
14	176.6	8.8	1736	US-08-557-006C-37	Sequence 37, Appl1
15	176.6	8.8	1783	US-08-557-006C-36	Sequence 36, Appl1
16	168.2	8.4	2659	US-08-557-006C-36	Sequence 36, Appl1
17	168.2	8.4	1507	US-08-523-849-4	Sequence 4, Appl1
18	168.2	8.4	1544	US-08-523-849-4	Sequence 4, Appl1
19	168.2	8.4	1544	US-08-523-849-4	Sequence 4, Appl1
20	135.4	6.7	2060	US-09-523-849-1	Sequence 1, Appl1
21	135.4	6.7	1429	US-08-159-385-4	Sequence 4, Appl1
22	130.8	6.5	2132	US-09-186-277-4	Sequence 4, Appl1
23	130.8	6.5	2132	US-09-186-277-3	Sequence 3, Appl1
24	121.4	6.0	1619	US-09-394-455-14	Sequence 14, Appl1
25	114	5.7	1599	US-08-256-465-1	Sequence 1, Appl1
26	114	5.7	1599	US-09-167-322-3	Sequence 3, Appl1
27	114	5.7	1599	US-09-023-655-1004	Sequence 1004, Ap

## ALIGNMENTS

28	113.6	5.7	3228	4	US-09-579-664B-5	Sequence 5, Appl1
29	112.4	5.6	2181	4	US-09-417-197-70	Sequence 70, Appl1
30	112.4	5.6	2184	4	US-09-417-197-138	Sequence 138, Appl1
31	112.4	5.6	2610	2	US-09-212-771-1	Sequence 1, Appl1
32	112.4	5.6	2610	3	US-09-091-058-1	Sequence 1, Appl1
33	112.4	5.6	2610	4	US-09-023-655-1206	Sequence 1206, Appl1
34	112.2	5.6	1458	4	US-09-230-896C-5	Sequence 5, Appl1
35	112	5.6	1694	4	US-09-579-664B-3	Sequence 3, Appl1
36	111.2	5.5	1480	4	US-09-016-434-1454	Sequence 1454, Appl1
37	109.2	5.4	1074	4	US-09-733-388-3	Sequence 3, Appl1
38	109.2	5.4	1158	4	US-09-733-388-1	Sequence 1, Appl1
39	109.2	5.4	1671	4	US-09-733-388-5	Sequence 5, Appl1
40	109.2	5.4	1733	4	US-09-620-312D-526	Sequence 526, Appl1
41	109	5.4	1282	2	US-08-878-989-12	Sequence 12, Appl1
42	109	5.4	1282	3	US-09-272-796-12	Sequence 12, Appl1
43	109	5.4	1282	4	US-09-016-434-953	Sequence 953, Appl1
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45	108.2	5.4	9862	4	US-09-691-861A-3	Sequence 3, Appl1

RESULT 1									
US-09-930-181-1									
Sequence 1, Application US/09930181									
Patent No. 6455292									
GENERAL INFORMATION:									
APPLICANT: Origene Technologies									
TITLE OF INVENTION: Full-length Serine Protein Kinase in Brain and Pancreas									
FILE REFERENCE: 160 101 VI									
CURRENT FILING DATE: 2001-08-16									
NUMBER OF SEQ ID NOS: 18									
SOFTWARE: PatentIn version 3.0									
SEQ ID NO 1									
LENGTH: 2908									
TYPE: DNA									
ORGANISM: Homo sapiens									
FEATURE:									
NAME/KEY: CDS									
LOCATION: (106)..(2112)									
US-09-930-181-1									
Query Match									
Best Local Similarity 99.9%; Score 2005.4; DB 4; Length 2908;									
Matches 2006; Conservative 0; Mismatches 1; Indels 0; Gaps 0;									
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QY	61	CTGGAAGACGCTGGGACAGGGGACAGAGTCTGTGAAGCTGGGGCTTCACTGGTC	120						
DB	166	CTGGAAGACGCTGGGACAGGGGACAGAGTCTGTGAAGCTGGGGCTTCACTGGTC	225						
QY	121	ACCTCCGACAGAGTGGCCATCAAGTCTGTCAGAGCTGAGAGTGGTGTG	180						
DB	226	ACCTCCGACAGAGTGGCCATCAAGTCTGTCAGAGCTGAGAGTGGTGTG	285						
QY	181	ATGAAGTGAAGCGGAGATCGCATCTGAGAGCTTATGACACCCACAGCTCTAAG	240						
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Qy      481 GGCATGAGCTCTCTCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 540
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Db      886 CTAGAGCACAATTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 945
Qy      841 CAGCCCACTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 900
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Db      2086 AAATGTGGAATTATCCGAAAAGTTAA 2112

RESULT 2
US-09-930-181-3
; Sequence 3, Application US/09930181
; Patent No. 6455292
; GENERAL INFORMATION:
; APPLICANT: Origene Technologies
; TITLE OF INVENTION: Full-Length Serine Protein Kinase in Brain and Pancreas
; FILE REFERENCE: 16U 101 VI
; CURRENT APPLICATION NUMBER: US/09/930,181
; CURRENT FILING DATE: 2001-08-16
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3
; LENGTH: 3364
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (482)..(2239)
US-09-930-181-3

Query Match      99.3%; Score 1993; DB 4; Length 3364;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2007; Conservative 0; Mismatches 0; Indels 4; Gaps 1;
Qy      1 ATGACATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 60
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Qy 241 CTGACGACGCTTTATGAAAAAATAATTTT---GTACCTGCTGTAGAACACGCTGTC 296  
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Qy 357 GAACTTCTCCGAGATCATCTCTGCGCTGACCTTTCAGACAGCCACTCATATGCCA 416  
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Db 2149 GCGTGGGCGGAGAGCTGTGACAGCAGCACTAAGCTGTATGAGAAATGATGAGAGGAGGCT 2208  
Qy 1977 TTCCAATGTGAAATTAATCCGAAAAATTA 2007  
Db 2209 TTCCAATGTGAAATTAATCCGAAAAATTA 2239

RESULT 3  
US-08-557-006-38  
; Sequence 38, Application US/08557006C  
; Patent No. 6258547  
; GENERAL INFORMATION:  
; APPLICANT: Beri, Rajinder K.  
; APPLICANT: Carling, David  
; APPLICANT: Forster, Robert A.  
; TITLE OF INVENTION: NUCLEIC ACID ENCODING AMP-ACTIVATED PROTEIN KINASE  
; FILE REFERENCE: NGAP/PHM37588/UST  
; CURRENT APPLICATION NUMBER: US/08/557,006C  
; CURRENT FILING DATE: 1996-03-06  
; PRIOR APPLICATION NUMBER: PCT/GB94/01093  
; PRIOR FILING DATE: 1994-05-20  
; PRIOR APPLICATION NUMBER: GB 9310489.1  
; PRIOR FILING DATE: 1993-05-21  
; PRIOR APPLICATION NUMBER: GB 9318010.7  
; PRIOR FILING DATE: 1993-08-31

NUMBER OF SEQ ID NOS: 44  
 SOFTWARE: Patentin Ver. 2.1  
 SEQ ID NO: 38  
 LENGTH: 1742  
 TYPE: DNA  
 ORGANISM: Human AMP protein kinase  
 US-08-557-006C-38

Query Match 11.2%; Score 225.4; DB 3; Length 1742;  
 Best Local Similarity 56.5%; Pred. No. 3.8e-42;  
 Matches 440; Conservative 0; Mismatches 336; Indels 3; Gaps 1;

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 693 CTACATCCCGAGATATCAACCTGTATTTGCCACCTGTGTAGCAACGTGTGAGGT 752  
 759 GAGCGCGCAGCGCGCTCAAGCTAGAGCATTCAGAAACATATGATATAGAGG 817  
 753 GAGCCCTTGAAGAGGACATATCAAGACATACAGAGCATGAATGTTTAAACAG 811

## RESULT 4

US-08-557-006C-39  
 Sequence 39, Application US/08557006C

PATENT INFORMATION:  
 GENERAL INFORMATION:  
 APPLICANT: Bertl, Rajindar K.  
 APPLICANT: Carling, David  
 APPLICANT: Forde, Robert A.

TITLE OF INVENTION: NUCLEIC ACID ENCODING AMP-ACTIVATED PROTEIN KINASE  
 FILE REFERENCE: NGA/P/PH37588/UST  
 CURRENT APPLICATION NUMBER: US/08/557,006C  
 PRIOR FILING DATE: 1996-03-06  
 PRIOR APPLICATION NUMBER: PCT/GB94/01093  
 PRIOR FILING DATE: 1994-05-20  
 PRIOR APPLICATION NUMBER: GB 9310489.1  
 PRIOR FILING DATE: 1993-05-21  
 PRIOR APPLICATION NUMBER: GB 9318010.7  
 PRIOR FILING DATE: 1993-08-31  
 NUMBER OF SEQ ID NOS: 44  
 SOFTWARE: Patentin Ver. 2.1  
 LENGTH: 2652  
 TYPE: DNA  
 ORGANISM: Rat  
 FEATURE:  
 NAME/KEY: gene  
 LOCATION: (1)..(1747)  
 OTHER INFORMATION: Full length cDNA sequence fragment of Human AMPK -  
 OTHER INFORMATION: fragment begins at nucleotide 24 and ends with  
 OTHER INFORMATION: nucleotide 1765  
 US-08-557-006C-39

Query Match 11.2%; Score 225.4; DB 3; Length 2652;  
 Best Local Similarity 56.5%; Pred. No. 4.4e-42;  
 Matches 440; Conservative 0; Mismatches 336; Indels 3; Gaps 1;

42 GTAGTGGGGCCCTACCGGCTGGAGAGAGCTGGGAGAGGCGACAGAGTGTGTA 101  
 40 GAAGATGGAGACTACGTGCTGGGGACACCTGGGCTGGACCTTGGCAAGTGA 99  
 102 GCTGGGGTTCACTGCTGCACTTCCAGAGGTGGCCATCAGATGCTCAACGGTGA 161  
 100 GATTGAGAAACATCAATTGACAGGCCATTAAGTGGCAGTTAAGATCTTAATAGACAGAA 159  
 162 GCTCAGGAGTGGTGTGATG--AAGTGGAGCGGAGATCGCATCTCTGAGCTCAT 218  
 160 GATTCGAGTTTAATATGTGTGGAAAAATTAACGAAATTCAAATCTTAACCTCT 212  
 219 TGAGCACCCCACTCTTAAAGTGCACAGCTTTATGAAAAAATAATTTGTACT 278  
 220 TCGCATCTCATATTATTCAACTCTACAGATGATGACACTCCAAAGACTTTTAT 279  
 279 GTGCTGAACACCTGTACGTGAGTGTGACTCTTCTGACTACCTGTGAAGAGGGAGCT 338  
 280 GGTATGGAATATGTGTGTGGAGGTGAATGTGTGACTCATCTGTAAACAGGGAGGT 339  
 339 GAGCCCTAAGAGGCTCGGAAGTCTTCCCGCAGATCATCTGCGCTGAGACTTCTGCA 398  
 340 TGAAGAGTGAAGCTGCGCGCTCTTCCAGCAATCTGTCTGCCGTGACACTGTCA 399  
 399 CAGCCACTCCATATGCCACAGAGGATCTGAACCTGTAACCTCTGCTGACAGAGAA 458  
 400 CAGGACATGTGTGTCCACAGGGACCTGAAGCCAGAAACGTGTGTGACCGCCAGAT 459  
 459 CAACATCCGATTCGCACACTTTGGCATGCGGTCCCTGCAAGTGTGGCAACAGCTGTGGA 518  
 460 GATCTTAAGATAGTGTGCTTGGACTCTTAATATGATGCAATGTGAATTTCTACG 519  
 519 GACCACTGTGTGATCCCGCACTACGCTGCCCGAGGTATCCGGGGGAGAAATATGA 578  
 520 AACTAGCTGTGATGCGCAAAATATGACAGCCGAGGTATCTCAGGAAGCTGTATGC 579  
 579 CGGCGGAAAGCGAGCTGTGAGCTGCGGCTCATCTGTTGGCTTGTGTGGGGGC 638  
 580 GGGTCTGAGGTGATATCTGAGAGCTGTGTATCTGTATGCCCTTCTGTGGCAC 639  
 639 TCTGCCCTTGCAGATGACAACTTGCGACAGCTGTGAGAGGTGAAGCGGGCGTGT 698  
 640 CTTCCGCTGACATAGACAGCTGCTTGAAGAGTCTTTAAGAAATCCGAGGGGTGT 699  
 699 CCACATGCGCACTTTATCCCGCCGACCTGCAAGTGTGCTACGGGGGAGATGAGGT 758

Db 700 CTATATCCCGAGATGTCAACCGTTCTATTGCGACCTCTCATGTGACATGCTGCGAGGT 759  
QY 759 GSAAGCGGCAAGCGGCTCAAGCTAGAGCACTTACAGAAACATATGATATAGGGG 817  
Db 760 GGACCCCTTGAAGAGCACTATCAAGACATTCAGAGCAATGAATGTTTAAACAG 818

RESULT 5  
US-08-557-006C-24

/ Sequence 24, Application US/08557006C  
/ Patent No. 625847  
/ GENERAL INFORMATION:  
/ APPLICANT: Bertl, Rajindar K.  
/ APPLICANT: Carling, David  
/ APPLICANT: Fordey, Robert A.  
/ TITLE OF INVENTION: NUCLEIC ACID ENCODING AMP-ACTIVATED PROTEIN KINASE  
/ FILE REFERENCE: NGAP/PH37588/UST  
/ CURRENT APPLICATION NUMBER: US/08/557, 006C  
/ CURRENT FILING DATE: 1996-03-06  
/ PRIOR APPLICATION NUMBER: PCT/GB94/01093  
/ PRIOR FILING DATE: 1994-05-20  
/ PRIOR APPLICATION NUMBER: GB 9310489.1  
/ PRIOR FILING DATE: 1993-05-21  
/ PRIOR APPLICATION NUMBER: GB 9318010.7  
/ PRIOR FILING DATE: 1993-08-31  
/ NUMBER OF SEQ ID NOS: 44  
/ SOFTWARE: Patent In Ver. 2.1  
/ SEQ ID NO 24  
/ LENGTH: 2761  
/ TYPE: DNA  
/ ORGANISM: Artificial Sequence  
/ FEATURE:  
/ OTHER INFORMATION: Description of Artificial Sequence: cDNA of rat  
/ OTHER INFORMATION: liver AMP protein kinase  
US-08-557-006C-24

Query Match 11.2%; Score 225.4; DB 3; Length 2761;  
Best Local Similarity 56.5%; Pred. No. 4.4e-42;

Matches 440; Conservative 0; Mismatches 336; Indels 3; Gaps 1;

QY 42 GTATGTTGGGCTTACCGGCTGAGAGAGCGCTGGGCAAGGGGAGAGAGGCTGTGTGAA 101  
Db 56 GAAGATCGGACACTAGCTGTGGGAGACACCTGGGCGTGGGACCTTGCGCAAAAGTAA 115  
QY 102 GCTGGGGGTTCACTGGGTCACTGCGAGAGGTCGACATCAAGATGCTAACCGTGAGA 161  
Db 116 GATTGAGAAACATCAATTGACAGGCGCATTAAGTGAAGATCTTAATGACAGAA 175  
QY 162 GCTCAGCGAGTCGCTGATG--AAGTGAGAGCGGAGATCGCGATCTGAAGCTCAT 218  
Db 176 GATTGCGAGTTTGAATGTTGTGAAAATAAAGAGAAATTCAAATCTTAACCTTT 235  
QY 219 TGAAGACCCCGACGCTCTAAGCTGACGACGCTTTTGAATAAATAATTTGACT 278  
Db 236 TCGTCACTCTCAATTAATCAACTCTACAGAGATCAAGACTCCACAGACTTTTAT 295  
QY 279 GGTGTAGAAACAGTGTCAAGTGTGAGCTCTTCACTACCTGCTGTAAGAGGGAGCT 338  
Db 296 GGTAAATGAAATATGTGTCTGAGAGTGAATTTGTCGACTACCTGTAACAGGAGGAT 355  
QY 339 GACCGCTTAAGAGGCTCGGAAGTTCTTCGCGAGATCATCTGCGCTGGACTTCCCA 398  
Db 356 TGAAGAGTGAAGCTCGCGGCTCTTCACAGAGATCTGTCTGCGCTGGAATCTGTA 415  
QY 399 CAGCCACTCCATATGCGACAGGAGTGAACCTGAAAACTTCGCTGTAAGAGAGAA 458  
Db 416 CAGGCAATGCTGTCTCAAGGAGCTGAAGCCAGAGACGTGTGCTGGAAGCCAGAT 475  
QY 459 CAACATCGGATGAGAGACTTTGGATGGCGTCCCTGAGGTTGGGAGAGCGCTGTGA 518  
Db 476 GAATGTAAAGATGAGTGAAGTGGAGCTCTCTAATATGATGATGAGATGTAATTTCTAG 535

QY 519 GACCACTGTGGGTCCTCCCACTACGCTGCCAGAGTATCCGGGGGAGAAATGA 578  
Db 536 AACTAGCTGTGATCGCCAAATTATGACAGACCGAGGTCAATCCAGAAAGCTATGC 595  
QY 579 CGGCGGAAAGGAGACGTTGTGAGTGGCGGCTCATCTGTTGCTGCTGTTGGGGC 638  
Db 596 GGTCTTGAAGTGTGAATCTGGAAGTGTGTTATCTGTATGCTCTGTTGAGC 655  
QY 639 TCTGCCCTTCAGATGCAACTTGCAGACGCTGTGAGAGGTAAGCGGGCGTGT 698  
Db 656 CTTCCGTTTCAAGATGAGACGCTGCTACGCTCTTTAAGAAAGATCCAGGGGCTGT 715  
QY 699 CCAATGCGGCACTTATCCCGCCGACTGCCAGAGTGTCTACGGGCGATGATGAGT 758  
Db 716 CTACATCCCGAGATCTCAACCGTTCTATTGCACTGTGCTGATGACATGCTGAGGT 775  
QY 759 GAGAGCGGCAAGCGGCTCAAGCTAGAGACATTCAGAAACATATGATATAGGGG 817  
Db 776 GGACCCCTTGAAGGAGCACTATCAAGACATTCAGAGCATGAATGTTTAAACAG 834

## RESULT 6

US-09-799-875-6  
/ Sequence 6, Application US/09799875  
/ Patent No. 6638721

## GENERAL INFORMATION:

/ APPLICANT: Meyers, Rachel  
/ APPLICANT: Kapeller-Libermann, Rosana  
/ APPLICANT: Williams, Mark

/ TITLE OF INVENTION: No. 6638721 Human Protein Kinases and Uses  
/ FILE REFERENCE: 35800/208996

/ CURRENT APPLICATION NUMBER: US/09/799, 875

/ PRIOR FILING DATE: 2001-03-06

/ PRIOR APPLICATION NUMBER: 60/182,059

/ PRIOR FILING DATE: 2000-02-11

/ PRIOR APPLICATION NUMBER: 09/659,287

/ PRIOR FILING DATE: 2000-09-12

/ NUMBER OF SEQ ID NOS: 32

/ SOFTWARE: FastSeq for Windows Version 4.0

/ SEQ ID NO 6

/ LENGTH: 3609

/ TYPE: DNA

/ ORGANISM: Homo sapiens

US-09-799-875-6

Query Match 10.7%; Score 214.6; DB 4; Length 3609;  
Best Local Similarity 54.5%; Pred. No. 1.4e-39;

Matches 430; Conservative 0; Mismatches 359; Indels 0; Gaps 0;

QY 45 TGTGGGCGCTTACCGGCTGAGAGAGCGTGGGCAAGGGGAGAGAGTGTGTAAGCT 104  
Db 12 TATGCGCTACTACAGATGACCGCACATCGGCAAGGCAACTCTCGGCTGTAAGCG 71  
QY 105 GGGGTTTCACTGCTCACTGCGCAAGAGTGGCCATCAAGATCTCAACCGTGAAGCT 164  
Db 72 GGCACGCACTCTGTCACCAAGGCGCAAGGTTGCTATCAAGATCAATGAAGACCGCT 131  
QY 165 CAGGAGTGGTGTGATGAAGTGGAGCGGAGATGCGCATCTGTAAGCTCATGAGCA 224  
Db 132 GATGAAGAAAACTTGAAGAAATTTTCGGAAGGTCAATTAATGAAGATGCTTGCCA 191  
QY 225 CCCCCAGTCTTAAGCTGACAGAGTTTATGAACAAAAAATATTGTAAGCTGTGCT 284  
Db 192 CCCCATTATATCAAGGCTCTACAGGTTATGAGAGACAGAACTGATTTATCTGTAAG 251  
QY 285 AGAAGCTGTCAAGTGTGAGTGTGAGTCTTCACTACTGTTGAAGAGGAGGCTGAGCC 344  
Db 252 AGAATATGCTAGTGAAGGAGAAATATTGAACCACTGTGTGCGCCCTGTAAGTGGAGA 311  
QY 345 TAAAGAGCTGGAAGTCTTCCGCGAGATCATCTGCGCTGAGCTTGTCCACAGCA 404  
Db 312 AAAGAGGCACTGGGAAGTTCAACAGATCTGACAGCTGTCTATTTTGTCTACTGTG 371

QY 405 CTCATATGCGACAGGAGTCTGAAACCTGAAAACCTCTGTCGACGAGAAACACAT 464  
 DB 372 GAACATGTTCAATCGATTTTAAAGCTGAAAATTACTTCTGATGCCAATCTGAATAT 431  
 QY 465 CCGCATCGACAGCTTTGGCATGGCGTCCCTGCAAGTTGGCGCACAGCTGTTGGAGACGAG 524  
 DB 432 CAATAATGACAGATTTTGGTTTCACTTCTTCACTCTGAGGCGAGCTGCTGAGACCTG 491  
 QY 525 CTGTGGGTCCCCCACTACGCTGCCCCGAGGTGATCCGGGGGAGAAATATGACGCGC 584  
 DB 492 GTGTGGCAGCCCTCCCTATGCTGACACTGAACTCTTGAAGAAAATATGATGAGCC 551  
 QY 585 GAAAGCGGAGCTGTGAGCTGGGGGCTCATCTGTTGCGCTTGTGTGGGGGCTCTGCG 644  
 DB 552 CAAGTGGACATCTGAGGCTGGAGTTGCTCTTACGCTGTGCTGTGGGGGCTGCGC 611  
 QY 645 CTTCGACGATGACACTTGGCAGCTGCTGAGAGTGAAGCGGGGCTGTTCACAT 704  
 DB 612 ATTGATGAGAGACACTGCAAGATCTGGGGGCGCGTGTGAGTGAAGTTCCGCA 671  
 QY 705 GCGGCACTTTATCCGCGCCGACTGCCAGACTCTGCTACGGGGCATGATGAGTGAAGC 764  
 DB 672 CCATTTTATGTTCCACAGATGTGAGATTGATCCGCAATGTGTGTTAGATCC 731  
 QY 765 CGCAGCGCGCTCAGCGTGAAGCAGATTCAGAAACATATGTTATAGGGGGCAGAA 824  
 DB 732 CAATTAAGCGCTCTCCATGAGAGCATCTGCAAGCAAGTGTGATGAAGTGAAGGAGCC 791  
 QY 825 TGAGCCCGA 833  
 DB 792 CGATCCCAA 800

RESULT 7  
 US-09-799-875-4  
 ; Sequence 4, Application US/09799875  
 ; Patent No. 6638721

GENERAL INFORMATION:  
 APPLICANT: Meyers, Rachel  
 APPLICANT: Kapeller-Libermann, Rosana  
 APPLICANT: Williamson, Mark  
 TITLE OF INVENTION: No. 6638721e1 Human Protein Kinases and Uses  
 TITLE OF INVENTION: Therefor  
 FILE REFERENCE: 35800/209996  
 CURRENT APPLICATION NUMBER: US/09/799, 875  
 CURRENT FILING DATE: 2001-03-06  
 PRIOR APPLICATION NUMBER: 60/182,059  
 PRIOR FILING DATE: 2000-02-11  
 PRIOR APPLICATION NUMBER: 09/659,287  
 PRIOR FILING DATE: 2000-09-12  
 NUMBER OF SEQ ID NOS: 32  
 SOFTWARE: FastSeq for Windows Version 4.0  
 SEQ ID NO 4  
 LENGTH: 5983  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 FEATURE:  
 NAME/KEY: CDS  
 LOCATION: (115)...(3723)  
 US-09-799-875-4

Query Match 10.7%; Score 214.6; DB 4; Length 5983;  
 Best Local Similarity 54.5%; Pred. No. 1.6e-39;  
 Matches 430; Conservative 0; Mismatches 359; Indels 0; Gaps 0;  
 QY 45 TGTGGGCGCCCTACCGGCTGAGAGACGCTGCGCAAGGGCAGACAGTCTGTGAAGCT 104  
 DB 126 TATCGGCTACTACAGATGACCGGACCATCGGCAAGGGCACTTGGGTGTCAAGCG 185  
 QY 105 GGGGTTCACTGCGTCACTTGCAGAAAGTGGCCATTAAGATCTCAACCGTGAAGCT 164  
 DB 186 GGGCAGCAGCTGCTCAAGAGGCAAGGTTGTCTATCAAGTCAATGATTAAGACCCAGCT 245

QY 165 CAGCGAGTGGTCTGATGAAGGTGAGCGGAGATCGGATCTGAACCTGATGAGCA 224  
 DB 246 GATGAAGAAACTTGAAGAGTTTCCGGAGAGTTCAATATGATGATGCTTGCCA 305  
 QY 225 CCCCACGCTCTAAGCTGACAGACCTTTATGAAAACAAAATATTTGTACTGTGCT 284  
 DB 306 CCCCATATCATCAGCTCTACCCAGGTATGAGAGACAGACGATGATTTATCTGTGAC 365  
 QY 285 AGAACAGTCTCAGGTGTGAGCTCTGCACTACCTGTTGAAGAAAGGAGCTGACGCG 344  
 DB 366 AGAATATGCTAGTGAAGGGGAAATATTTGACACCTGTGTGGCCATGTAATGACAA 425  
 QY 345 TAAGAGGCTCGAAGTCTTCGCGAATCATCTGCGCTGAGATTCTGCCACAGCCA 404  
 DB 426 AAGAGAGCAGCTCGGAAGTTCAACAGATCGCACAGCTGTCTATTTTGTACTGTG 485  
 QY 405 CTCATATGCGACAGGATCTGAAACCTGAAACCTCTGCTGAGACGAGAAACAAT 464  
 DB 486 GAACTTTGTCATGATTTTAAAGCTGAAAATTTACTTCTGTGATGCCAATCTGAATAT 545  
 QY 465 CCGCATGCGACACTTGGCATGGCGTCCCTGCAAGTTGGCGACAGCTGTGAGACGAG 524  
 DB 546 CAATAATGAGATTTTGTGTTTCAAGTAACTCTTCACTCTGCGGACGCTGTAAGACCTG 605  
 QY 525 CTGTGGTCCCCCACTACGCTGCCCCGAGGTGATCCGGGGGAGAAATGACGGCG 584  
 DB 606 GTGTGGCAGCCCTCCCTATGCTGACCTGAACTTTTGAAGAAATATATATGAGCC 665  
 QY 585 GAAAGCGGAGCTGTGAGAGCTGCGCGCTCATCTGCTGCTGCTGCTGCTGCTGCTGCTG 644  
 DB 666 CAAGTGAACATCTGAGAGCTTGGAGTTGCTCTTGAAGTTGTGTGAGGCTCCCTGCG 725  
 QY 645 CTTCGACATGACAACTTGGCAGCACTGCTGTGAGAAAGTGAAGCGGGGCTGTTCACAT 704  
 DB 726 ATTGATGAGAGCAGACTGCAAGATCTGGGGGCGCGTGTGAGTGAAGTTCCGCA 785  
 QY 705 GCGCCACTTTATCCGCGCCGACTGCCAGAGTGTGCTACGGGGCATGATCGAGTGAAGC 764  
 DB 786 CCATTTTATGTTCCACAGATGTGACATTTGATCCGCAATGTGTGTGATGATCC 845  
 QY 765 CGCAGCGCGCTCAGCTGAGCAGATTCAGAAACATATGATATGAGGGGCAAGAA 824  
 DB 846 CAATTAAGCGCTCTCCATGAGCAGATCTCAAGCAGATGATGAAGCTTGAAGGAGCGC 905  
 QY 825 TGAGCCCGA 833  
 DB 906 CGATCCCAA 914

RESULT 8

US-09-930-181-5  
 ; Sequence 5, Application US/09930181  
 ; Patent No. 6455292  
 GENERAL INFORMATION:  
 APPLICANT: Origene Technologies  
 TITLE OF INVENTION: Full-Length Serine Protein Kinase in Brain and Pancreas  
 FILE REFERENCE: 16U 101 VI  
 CURRENT APPLICATION NUMBER: US/09/930,181  
 CURRENT FILING DATE: 2001-08-16  
 NUMBER OF SEQ ID NOS: 18  
 SOFTWARE: PatentIn version 3.0  
 SEQ ID NO 5  
 LENGTH: 213  
 TYPE: DNA  
 ORGANISM: Homo sapiens  
 FEATURE:  
 NAME/KEY: CDS  
 LOCATION: (1)...(213)  
 US-09-930-181-5

Query Match 10.6%; Score 213; DB 4; Length 213;  
 Best Local Similarity 100.0%; Pred. No. 1.3e-39;  
 QY 105 GGGGTTCACTGCGTCACTTGCAGAAAGTGGCCATTAAGATCTCAACCGTGAAGCT 164  
 DB 186 GGGCAGCAGCTGCTCAAGAGGCAAGGTTGTCTATCAAGTCAATGATTAAGACCCAGCT 245

Matches 213; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGACATGACGGGGAGAGAGCGGGCGCAGACGCGAGTATGTTGGCCCTAACCG 60  
Db 1 ATGACATGACGGGGAGAGAGCGGGCGCAGACGCGAGTATGTTGGCCCTAACCG 60  
QY 61 CTGAGAGAGACGCTGGGCAAGGGGCAAGAGTGTGTAAAGTGGGGGTTCACTGCGTC 120  
Db 61 CTGAGAGAGACGCTGGGCAAGGGGCAAGAGTGTGTAAAGTGGGGGTTCACTGCGTC 120  
QY 121 ACCGCGCAGAGGTGCGCATCAAGATGTCACCGGTAGAGCTCAGCGAGTGGTGTG 180  
Db 121 ACCGCGCAGAGGTGCGCATCAAGATGTCACCGGTAGAGCTCAGCGAGTGGTGTG 180  
QY 181 ATGAGGTGAGCGGGAGATCGCGATCTTGAAG 213  
Db 181 ATGAGGTGAGCGGGAGATCGCGATCTTGAAG 213

## RESULT 9

US-09-101-146-44  
Sequence 44; Application US/09101146  
Patent No. 6124125  
GENERAL INFORMATION:  
APPLICANT: Dartmouth College, St. Vincent's Institute of  
APPLICANT: Medical Research, Kemp et al.  
TITLE OF INVENTION: No. 6124125el AMP Activated Protein Kinase  
NUMBER OF SEQUENCES: 64  
CORRESPONDENCE ADDRESS:  
ADDRESSES: Jane Massey Licata, Esq.  
STREET: 66 E. Main Street  
CITY: Marlton  
STATE: NJ  
COUNTRY: USA  
ZIP: 08053  
COMPUTER READABLE FORM:  
MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB STORAGE  
COMPUTER: IBM PC  
OPERATING SYSTEM: WINDOWS 95  
SOFTWARE: WORDPERFECT 6.0 FOR WINDOWS  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/101,146  
FILING DATE: October 7, 1998  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: PNT450  
FILING DATE: 8 JAN 1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Jane Massey Licata  
REGISTRATION NUMBER: 32,257  
REFERENCE/DOCKET NUMBER: DC-0050  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (856) 810-1515  
TELEFAX: (856) 810-1454  
INFORMATION FOR SEQ ID NO: 44:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1647  
TYPE: Nucleic acid  
STRANDEDNESS: Single  
TOPOLOGY: Linear  
ANTI-SENSE: No  
US-09-101-146-44

Query Match 10.6%; Score 213; DB 3; Length 1647;  
Best Local Similarity 55.6%; Pred. No. 2.5e-39;  
Matches 430; Conservative 0; Mismatches 340; Indels 3; Gaps 1;

QY 42 GTATGTTGGCCCTACCGCTGAGAGACGCTGGGCAAGGGGCAACAGTCTGTGTA 101  
Db 33 GAAGATCGGCGACATACCTCTGGGGAGACGCTGGGCGCTGGGCACTTGGGAAAGTGA 92  
QY 102 GCTGGGGGTTCACTGCTGACCTGCGAGAGAGGTGGCATCAAGATCGTCAACCGTAGAA 161

Db 93 GGTGGCAGAGCAGAGTGAAGTGAATGAAGTGTCTGTAAGTACTCAACCGGAGAA 152

QY 162 GCTC--AGCGAGTGGTGTGATGAGAGTGGAGCGGAGATCGGATCTGAAGCTCAT 218

Db 153 GATTGAGAGCCTGAGACGTGTGTGGGAAATCCGAGAGATTCAGAACTGAAAGCTTTT 212

QY 219 TGAGACATCCCAAGCTCTTAAAGTGTGACAGAGTATTATGAAACAAATAATTTTGACT 278

Db 213 CAGGACACCTCATATATATCAAACTGTACAGTCAACCGTGTGATATTTTCAT 272

QY 279 GGTGTAGAACGCTGTGAGGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 338

Db 273 GGTGTAGAACGCTGTGAGGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 332

QY 339 GAGGCTTAAAGAGGCTGGAAAGTTCTTCCGCAATCATCTGTGCTGAGACTTCTGCA 398

Db 333 GAGGCTTAAAGAGGCTGGAAAGTTCTTCCGCAATCATCTGTGCTGAGACTTCTGCA 392

QY 399 CAGCCACTCCATATGCGCACAGAGATCTGAACCTGAACCTGCTGCGAGAGAGAA 458

Db 393 CAGGCTATGTGTGCTCCACAGATTTGAACCTGAACCTGCTGCGAGAGAGAA 452

QY 459 CAACATCCGCAATCGCAGACTTTGGCATGCGCTGCGAGTGTGCGCAACGCTGTGGA 518

Db 453 GAATCAAAAGATAGCGAGCTTGGCTTTCAAAATGATGTCAGATGGTGAATTTTAAAG 512

QY 519 GACCAAGTGTGGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 578

Db 513 AACGAGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 572

QY 579 CGGCGGAGAGCGAGCTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 638

Db 573 AGGCTTGAATGAGATCTGAGAGAGGGGTGATTTCTATGTTGCTGTGTGAGAC 632

QY 639 TCTGCTTTCAGATGACAACTTGCAGACCTGCTGAGAGGTGAACCGGGCGGTG 698

Db 633 TCTGCTTTCAGATGACAACTTGCAGACCTGCTGAGAGGTGAACCGGGCGGTG 692

QY 699 CCACATGCGGACCTTATCCCGCGGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 758

Db 693 TTATGCTTCAATGATTTGAATCCCTGTATATAGCTTTTGAAGCATATGCTGACAGT 752

QY 759 GAGCGCGGAGCGGCTCAGCTAGAGCATTGAGACATATGATATGATA 811

Db 753 AGATCTTATGAGAGGCGCATATAAAGATATGAGGACATGATATGTTA 805

## RESULT 10

US-09-984-890-1  
Sequence 1; Application US/09984890  
Patent No. 6492156  
GENERAL INFORMATION:  
APPLICANT: YAN Chunhua et al.  
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC  
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES  
TITLE OF INVENTION: THEREOF  
FILE REFERENCE: C1001306  
CURRENT APPLICATION NUMBER: US/09/984,890  
NUMBER OF SEQ ID NOS: 4  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 1  
LENGTH: 2175  
TYPE: DNA  
ORGANISM: Homo sapiens  
US-09-984-890-1

Query Match 10.6%; Score 212.6; DB 4; Length 2175;  
Best Local Similarity 54.2%; Pred. No. 3.4e-39;  
Matches 431; Conservative 0; Mismatches 354; Indels 0; Gaps 0;

QY 47 TTGGGCTTACCGCTGAGAGAGCTGGGCAAGGGGCAAGACAGTCTGTGTAAGCTGG 106

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Db      149 TTGAAACTACCGGCTCCTCAAGACCATTTGGCAAGGTATTTTCCNAGGTGAAGTTGG 208
Qy      107 GGGTCTACGCGTCACTCCGCGAGAGGTGGCCATCAATGCTCAACCTGAGAGTCA 156
Db      209 CCCGACACATCTCTGATGGAAGAGGTAGCTGTGAAGATTAATGACAAAGCTCACTGA 258
Qy      167 GCGAGTGGTGTGTGAAGAGTGAAGCGGAGATCGCATCTGAAGCTCAATGAGCACC 226
Db      269 ACTCCCTCCAGCTCCAGAAACTATTTCCGCGAAGTAAATATGAGGTTTGAATCATC 328
Qy      227 CCCAGCTCTAAAGCGACAGCGCTTTTGAAGAAACAAATATTTTACTGCTGTAG 286
Db      329 CCAACTAGTAAATTTATTTGAAGTATGAGATGAGAAACCTCTACTGTCATGG 388
Qy      287 AACAGCTGACGTGTGTGATCTTCTGACATCTGCTGTGAAGAGGAGGCTGACCGCTA 346
Db      389 AGTAGGCTAGTGGCGAGAGGTATTTGATTAAGTACTAGTGGCTGACAGATGAAGAAA 448
Qy      347 AGAGGCTCGAAGTTCTTCGCGAGATCATCTCGGCGTGAATTTGCGACAGCGACT 406
Db      449 AAGAGGCTGAGCCAAATTCGCGAGGTAGTGTCTGCTGAGTACTGTCAAGAGT 508
Qy      407 CCATATGCCACAGGAGATCTGAATCTGAAACCTCTCTGTGACGAGAGAACAGATCC 466
Db      509 TTATGTCCATAGAGACTTAAAGAGAGAAACCTGCTTGGATGCTGATATGACATCA 568
Qy      467 GCATGCGACATTTGGCATGAGGCTCCCTGACAGGTGGCGACAGCTGTTGAGACAGCT 526
Db      569 AGATTGCAACCTTTGGCTTCAAGCATGATTCACCTTTGGGAGACAGCTGACCTTCT 628
Qy      527 GTGGTCCCCCACTACGCTGCGCCGAGGTGATCGGGGGGAGAGATGACGCGCGA 586
Db      629 GTGGAGTCCCTTATCTGCTCCAGAGACTCTTCCAGGCGAAAAATATGATGAGCCG 688
Qy      587 AGCGGACGCTGAGAGCTGCGGCGTCAATCTGCTGCTGCTGCTGCTGCTGCTGCT 646
Db      689 AGGTGAGTGTGAGCTCTGAGATTAATCTCTTAATACCTGCTGAGGAGTCCCTGCTT 748
Qy      647 TCGACGATGACACTTGGCAGAGCTGCTGAGAGAGGTGAACGCGGCGGCTTCCACATGC 706
Db      749 TTGATGAGACAGAACTCAGAGAGCTGCGGAGACGGGTACTGAGGGGAAAAATACCTATTC 808
Qy      707 GCGACTTATCCCGCGAGCTGCGAGAGCTGCTGAGGGGCAATGATGAGGTGAGACCGG 766
Db      809 CATTTAATGTCCACGACCTGTGAAACCTGCTTAAAGAAATTTCTTATTTTATCCCA 868
Qy      767 CACGCGGCTTACGCTAGAGACATTCAGAAACATATGATATATAGGGGCGAGAGATG 826
Db      869 GCAAGAGAGGCACTTATGAGCAATCATGAAAGATGATGATGATGATGATGATGATG 928
Qy      827 AGCCGGAACGAGAGC 841
Db      929 ATGATGAATTAAGC 943

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; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO: 44
; LENGTH: 1747
; TYPE: DNA
; ORGANISM: Human
; FEATURE:
; NAME/KEY: gene
; LOCATION: (1)..(1747)
; OTHER INFORMATION: Full length cDNA sequence fragment of Human AMPK -
; OTHER INFORMATION: fragment begins at nucleotide 24 and ends with
; US-08-557-006C-44

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Query Match	10.0%	Score 200.4	DB 3	Length 1747
Best Local Similarity	56.1%	Pred. No. 1.9e-36		
Matches 440	Conservative 0	Mismatches 336	Indels 8	Gaps 3

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Qy      42 GTATGTTGGGCGCTACCGGCTGAGAGAACGCTGGGCGAGAGGCGACAGCTGTGTGA 101
Db      33 GAAATGCGACACTGCTGCTGGGAGACCTGCGCGTGGGCACTTGGCGAAAGTGA 92
Qy      102 GCTGGGGGTTCACTGCTCACTGCCAGAGGTGGCCATCAGATGCTACCGTAGAA 161
Db      93 GATTGGAACATCAATTTGACAGGCCATAAAGTGGCAGTTAATCTTAAATAGACAGA 152
Qy      162 GCTAGGAGATCGGTGTGATG--AAGGTGAGCGGAGATCGCATCTGAATCAT 218
Db      153 GATTGCGAGTTTGAATGTTGTGAAATAAATGAGAAATTCAAATCTTAACTCTT 212
Qy      219 TGAGCACCCCGACGCTCTAAAGCTGACAGACGTTTATGAAAAAATAATTTGTACT 278
Db      213 TCGCATCTCATATTAATTAATCAACTTACCAAGTATCAGACATCCACAGACTTTTAT 272
Qy      279 GGTCTGAACACGCTGAGGTGAGTGTGAGCTCTTCACTCTCTGTGAGAGAGAGCT 338
Db      273 GGTATGAAATATGTGTGAGAGTAAATTTGCACTAATCTGTAACAGGAGGCT 332
Qy      339 GACGCTTAAGAGAGCTGGAAGTTCTTCCGCGAGATCATCTGCGCTGACTTGTG--C 396
Db      333 TGAAGAGGTGAAGAGCTGCGCGCTTCCAGCAGATTTGTCTGCGGTGACTACTGTCT 392
Qy      397 CACAGGACCTCCATATGACAGAGATCTGAACCTGAAACCTCTCTGTGAGAGAG 456
Db      393 CACAGGACATGTTGTGCAAGGAGCTGAAAGCCAGAGAGAGAGTGTGAGAGCCGAG 452
Qy      457 AACAACTCCGATCCGACACTTTGAGATGAGGCTGCTGAGCTGAGCTGAGAGAGCTGTG 516
Db      453 ATGATCTTAAGATAGCTGACTCTGACTCTTAATATGATGATGATGATGATGATGAT 512
Qy      517 GAGACGAGCTGTGGGTCCCGCCTACAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 576
Db      513 GAACTAGCTGTGATGCGCAATTAATGAGACAGCGAGGTATCTCAAGAAAGCTGTAT 572
Qy      577 GACGCGGAGAGCGAGAGCTGAGAGCTGCGGCTGATCTGTTGCTGCTGCTGCTGCTG 636
Db      573 GCGGCTCTGAGGTATATCTGAGCTGTGTATCTGTATCTGTATGCTGCTGCTGCTG 632
Qy      637 GCTTGTGCTT---GAGATGACAACTTGGCAGAGCTGTGAGAGAGTGAAGGCGG 693
Db      633 ACCCTCCGTTGACGACATAGACAGCTGCTTCAAGCTCTTAAAGATCCGAGGCT 692
Qy      694 GTGTTCAATGCGCAGCTTATCCCGCGCAGCTGCTGCTGCTGCTGCTGCTGCTGCTG 753
Db      693 GTGTTCAATCCCGAGATATCAACGCTTATATGCACTCTGCTGATGACATGCTG 752
Qy      754 GAGTGAAGCGCGACGCGCTGACGCTGAGAGCAATTCAGAAACATATGATGATTA 813
Db      753 CAGTGAACCTTTGAAGAGCACTATCAAGACATTAAGAGAGATGATGATTA 812
Qy      814 GGGG 817
Db      813 CAGG 816

```



RESULT 12  
US-09-359-161-4  
Sequence 4, Application US/09359161A  
Patent No. 6342656  
GENERAL INFORMATION:  
APPLICANT: Bradford, Kent J.  
APPLICANT: Danal, Peetambar  
APPLICANT: Yang, Hong  
APPLICANT: Cooley, Michael  
APPLICANT: Domier, Bruce  
APPLICANT: Gee, Oliver  
TITLE OF INVENTION: The Regents of the University of California  
TITLE OF INVENTION: Regulation of Source-Sink Relationships and Responses  
FILE REFERENCE: 023070-095900US  
CURRENT APPLICATION NUMBER: US/09/359,161A  
NUMBER OF SEQ ID NOS: 7  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 4  
LENGTH: 1929  
TYPE: DNA  
ORGANISM: Lycopersicon esculentum  
FEATURE:  
OTHER INFORMATION: Lycopersicon esculentum plant homolog of yeast  
OTHER INFORMATION: SNF1 kinase subunit of protein kinase (lesNf1)  
US-09-359-161-4

Query Match 9.5%; Score 191.4; DB 4; Length 1929;  
Best Local Similarity 54.0%; Pred. No. 2.2e-34;  
Matches 415; Conservative 0; Mismatches 351; Indels 3; Gaps 1;

QY 43 TATGTGGGCCCTACCGGCTGAGAGACGCTGAGGAGGCGACAGGTCTGTGAAG 102  
DB 75 TTTTACGGAACTATAAATCGGGAAACACTTGGCATTTGATTCGGCAAGTTAA 134  
QY 103 CTGGGGGTACTGCGCTGACCTGCGAGAGTGGCCATCAAGTCTGCAACCTGGAAG 162  
DB 135 ATAGCTGAACATAGTTAAGGACCAAGTCTGTCAAGTCTTAATCTTCGAAA 194  
QY 163 CTGAGGAGTCG---TGCTGATGAAGTGAAGCGGAGATCGCATCCGAACTCAT 219  
DB 195 ATAGGAATATGACATGAGAGAAAGTCCGTAGAAATCAAAATATTGAGATTGTC 254  
QY 220 GAGCACCCCACGTCCTAAAGCTGACGACGCTTATGAAAACAAAATATTTGACTG 279  
DB 255 ATGATCCTCATATTAATACGCTTTATGAGTCAATAGACACATCAGATATATATGT 314  
QY 280 GTGCTAGAACAGGTCAGGTCGTGAGCTCTTGAATACCTGTTGAAGAGGAGGCTG 339  
DB 315 GTATGAGATATGTAATCTGCGAGTTATTTGATTAATCTGTGAGAGGCGAATTG 374  
QY 340 AGCCCTAAGAGGCTCGAAAGTTCTTCGCGACATCATCTGCGTGAATCTTGGCCAC 399  
DB 375 CAGAGGATGAAGCTGTAATCTTTTTCAGAGATATTTCTGCTGAGATGCTCAT 434  
QY 400 AGGCATCCATATGCAACAGGATCTGAAACCTGAAAACCTCTGCTGACGAGAAAC 459  
DB 435 AGAAACATGCTGTTATGAGACCTTAAGCTGAAAACCTCTTGTGACCTCCAAATG 494  
QY 460 AACATCCGATCCGACATTTTGGCATGCGCTCCCTGAGTTGGACAGCTGTGGAG 519  
DB 495 AATGTGAATGCAATTTTGGTTTGAAGAAATATGCGCATGCTATTTTCTGAAG 554  
QY 520 AACAGCTGTGGTCCCCCAGCTGCGCTCCCGAGGTATCCGGGGGAGAAATATGAC 579  
DB 555 ACAAGTTGCGAAGCCCAATATGCTGCCCCAGAGTATATCAAGTAAATTTATGCT 614  
QY 580 GAGCGGAGGCGAGCTGTGAGCTGCGGCTCATCTGCTGCTGCTGAGGGGCT 639  
DB 615 GAGCGGAGGATGATGATGAGCTGTGATTTATCTTATGCTCTTCTGTGACAC 674

QY 640 CTGCCCTTGACAGATGACAACTTGGACAGCTGTCGAGAAAGTGAAGCGGCGCTGTC 699  
DB 675 CTTCGCTTGAAGATGAAAACATACCAATCTTTTAAGAAATAAAGGTAATATAT 734  
QY 700 CACATGCCGACATTTATCCGCCGACCTGCCAGATCTGTACCGGGGATGATCGAGTG 759  
DB 735 ACTTGCCAGCCATTTATACAGCTGTGTGAGAGGATTTGATTCGAGATGCTTATGTC 794  
QY 760 GAGCGCGAGCGGCGCTCACGCTAGAGACATTCAGAAACATATGTGT 808  
DB 795 GACCAATGAAGCAATGATATTCCTGAGATTCCTGACCTTGTGT 843

RESULT 13  
US-09-579-664B-4  
Sequence 4, Application US/09579664B  
Patent No. 6514719  
GENERAL INFORMATION:  
APPLICANT: Immunex Corporation  
APPLICANT: Bird, Timothy A.  
APPLICANT: Virca, G. Duke  
APPLICANT: Martin, Unja  
APPLICANT: Anderson, Dirk M.  
TITLE OF INVENTION: NOVEL MORINE AND HUMAN KINASES  
FILE REFERENCE: 2923-A  
CURRENT APPLICATION NUMBER: US/09/579,664B  
NUMBER OF SEQ ID NOS: 36  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 4  
LENGTH: 2902  
TYPE: DNA  
ORGANISM: Mus musculus  
US-09-579-664B-4

Query Match 9.3%; Score 186.4; DB 4; Length 2902;  
Best Local Similarity 53.5%; Pred. No. 3.4e-33;  
Matches 413; Conservative 0; Mismatches 356; Indels 3; Gaps 1;

QY 52 CCTACCCGCTGAGAAAGACCTGGCAAGGAGGAGACAGAGTCTGTGAAGCTGGGCTT 111  
DB 288 CGCTACGATTCCTGGAACGCTGGCAAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 347  
QY 112 CACTGCTGACCTGCGACAGAGTGGCATCAAGATCTGCAACCTGAGAGCTGACGAG 171  
DB 348 GAGAGCTGGGGCGCTGTGTGGCCATCAAGTCCATCAAGAAAGCAAAATCAAGATGAG 407  
QY 172 TCGGTGCTGTAAGGTGAGACGGGAGATCGAATCCGTAAGCTCATGAGACACCCGAC 231  
DB 408 CAGATCTGCTGCAATCGAGAGGAGATTAGATCATGTCTTACTTCACACACCCGAC 467  
QY 232 GTCTAAAGCTGACAGCGTTATGAAAACAAAATATTTGATCTGTGCTGAAACAC 291  
DB 468 ATCATTTGCCATTCATGAAAGTTTGAAGATGACAGCAAGATTTGATGTCATGAGAT 527  
QY 292 GTGTCAAGTGTGAGCTTTGATCACTGCTGTAAGAAAGGAGGAGCTGAGCCCTAAGAG 351  
DB 528 GCGAGCCGAGCGATCTGATGATTAATCAATGAGGCGCAAGCTGAGTGAAGCGGAC 587  
QY 352 GCTCGAAGTTCTTCGCGACATCATCTGCGCTGACATTTCTGCAAGCCACTGCATA 411  
DB 588 GCGAGGATTTCTTCGAGAGATGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 647  
QY 412 TGCCACAGGATCTGAAACCTGAAACCTCTGCTGTAAGAAAGAAACATATCCGATC 471  
DB 648 GTTACCGAGATCTCAAGCTGGAACATCTTCTTATATGCAATGAAACATTAAGATT 707  
QY 472 GCAACTTTGACATGAGGCTCCCTGCAAGTTGGCGACAGCTGTGAGACACAGCTGTGGG 531  
DB 708 GCTACATTTGCTCTCTCAACCTTACCAAGGAGCAAGTTCTTCCAGACCTTCTGTGGG 767  
QY 532 TCCCCCACTAGAGCTGCGCCGAGAGTATCCGGGGGAGAAATATGACGCGCGGAGGCG 591

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Db      768 AACCCCTCTTACGCTCGCTGCTAGATGATCAACGGGAAAGCCCTATGCGGCCACAGAGTG 827
QY      592 GACGCTGAGAGTGGGCGATCATCTGTTGCGCTTGCGTGGGGGCTGCCCTTTGAC 651
Db      828 GACAGCTGCTCTGCGGCGTTCTCTGTACATCTGTGTGATGCGACACATGCTTGTAC 887
QY      652 GATGACACTTGGCGACAGCTGTGAGAAAGGTGAAGCGGGGCGTGTTCACATGCGCAC 711
Db      888 GGGCAGATCATTAACAACACTGTGAGCAATTCAGTAACGGGCGTTACCTGAGCGGCC 947
QY      712 TTATTCGCGCCGACATGCGACAGTGTCTACGGGCGCATGATCAGGTGAGCGCGCACGC 771
Db      948 ---AAGCGTCCGATGCGTGTGCGCTGATCCGGTGGCTGTATGATGTAAGCCACCGCT 1004
QY      772 CCGCTCAGCGCTGAGCAGCATTCAGAAACATATGATATATAGGGGCGAAGA 823
Db      1005 CCGGCGACACGTGAGAGATGTAGCCAGTCATTTGTGTGTCACTGGGCTTACA 1056

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## RESULT 14

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US-08-557-006C-37
; Sequence 37, Application US/08557006C
; Patent No. 6258547
; GENERAL INFORMATION:
; APPLICANT: Beri, Rajindar K.
; APPLICANT: Carlings, David
; APPLICANT: Forde, Robert A.
; TITLE OF INVENTION: NUCLEIC ACID ENCODING AMP-ACTIVATED PROTEIN KINASE
; FILE REFERENCE: NGAP/PHM7588/UST
; CURRENT APPLICATION NUMBER: US/08/557,006C
; PRIOR FILING DATE: 1996-03-06
; PRIOR APPLICATION NUMBER: PCT/GB94/01093
; PRIOR FILING DATE: 1994-05-20
; PRIOR APPLICATION NUMBER: GB 9310489.1
; PRIOR FILING DATE: 1993-05-21
; PRIOR APPLICATION NUMBER: GB 9318010.7
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: Patent Ver. 2.1
; LENGTH: 1736
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Rat liver AMP
; OTHER INFORMATION: protein kinase
US-08-557-006C-37

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Query Match      8.8%; Score 176.6; DB 3; Length 1736;
Best Local Similarity 52.6%; Pred. No. 4.9e-31;
Matches 408; Conservative 0; Mismatches 364; Indels 3; Gaps 1;

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QY      42 GTATCTGGGCGCCCTACCGGCTGGAGAGACGCTGGGGAAGGGCGACAGAGTGTGAA 101
Db      33 GAAGATCGGACACTGACGTGCTGGCGACACGCTGGGGGTGGGACCTTGGCAATGAA 92
QY      102 GCTGGGGGTTCACTCCGTCACCTGCCAGAGGTGGCCATCAAGTCTCAACCGTGAGA 161
Db      93 GATGAGAGACATCAATTAACAGGCCATTAAGTGGCAGTTAAATCTTAAATAGACAGA 152
QY      162 GGTGCGAGTCCGTCGTGATG---AAGTGGAGCGGGAGATGGCATCTGTAAGTCTAT 218
Db      153 GATTGCGAGTTAGTGTGTTGGAAATAAAGGAAATTCGAAATCTTAAACTCTT 212
QY      219 TGAGACCCCGACGCTCTTAAGCTGACGAGCGTTATGAAACAAAATATTTTACCT 278
Db      213 TCGTATCTCATATTAATCAAACTATACAGGTATCAGACATCCCAAGATTTTAT 272
QY      279 GGTGTGAAACAGCTGTCAGTGTGAGCTCTTGTGATCTGCTGTAAGAGGGAGGCT 338
Db      273 GGTAAATGAAATATGTGTGAGGAGTAATTTATTTGACTACATCTGTAAGCATGACGGGT 332

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QY      339 GACGCTTAAGAGGCTCGAAGTTCTTCCGAGATCATCTGCGCTGACTTCTGCCA 398
Db      333 TGAAGAGTGAAGACCGCGCGCTTTTCAGAGATCTGTGCTGTGATTAATCTGTA 392
QY      399 CAGGCATCCATATGCCACAGAGGATCGAAGCTGAAGAAACCTGCTGTGACAGAGA 458
Db      393 TAGGCATATGTTGTATGATGACACTGAAACAGAGAAATGTCTGTGTGATGACACAT 452
QY      459 CAACATCCGATCGACAGACTTTGACATGCGCTCTTCAGAGTTGCGACAGCCTGTGGA 518
Db      453 GAATGCCAAGATAGCCATTTCGATTAATTAATGATGATGATGATGAAATTTCTGAG 512
QY      519 GACGAGCTGTGGTCCCCCACTACGCGCTGCGAGGTGATGATGCGGGGAGAGAATGA 578
Db      513 AACTAGTTGCGATCTCAAAATTAATGACAGACCTGAAAGTCAATCTGACGAGATGTAT 572
QY      579 CCGCGGAGCGGACGCTGTGAGCTGCGGCGTCACTCTGCTGCTGCTGCTGCTGCGG 638
Db      573 AGGTCTGAGATGATGATCTGTGAGCTGTGTATCTGTATGCTCTTCTTGTGCGAC 632
QY      639 TCTGCGCTGACAGATGACAACTTGGCGAGCTGTGAGAAAGGTGAACCGGGCGTGT 698
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QY      699 CCACATCCGCACTTTATCCCGCCGACCTGCGAGCTTGTCTACGGGCGATATGAGT 758
Db      693 TTATATCCAGAAATATCTCAATGTTCTGTGCTGCTGCTGCTGCTGCTGCTGCT 752
QY      759 GGAGCGCGACGCGCGCTGACGCTAGAGCAGATTCAGAAACATATGATATATA 813
Db      753 TGACCCACTGAAGCAGCAACTATCAAAAGACATTAAGAGCATGATGATTTAA 807

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## RESULT 15

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US-08-557-006C-36
; Sequence 36, Application US/08557006C
; Patent No. 6258547
; GENERAL INFORMATION:
; APPLICANT: Beri, Rajindar K.
; APPLICANT: Carlings, David
; APPLICANT: Forde, Robert A.
; TITLE OF INVENTION: NUCLEIC ACID ENCODING AMP-ACTIVATED PROTEIN KINASE
; FILE REFERENCE: NGAP/PHM37588/UST
; CURRENT APPLICATION NUMBER: US/08/557,006C
; PRIOR FILING DATE: 1996-03-06
; PRIOR APPLICATION NUMBER: PCT/GB94/01093
; PRIOR FILING DATE: 1994-05-20
; PRIOR APPLICATION NUMBER: GB 9310489.1
; PRIOR FILING DATE: 1993-05-21
; PRIOR APPLICATION NUMBER: GB 9318010.7
; PRIOR FILING DATE: 1993-08-31
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: Patent Ver. 2.1
; SEQ ID NO 36
; LENGTH: 1783
; TYPE: DNA
; ORGANISM: Human AMP protein kinase
US-08-557-006C-36

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Query Match      8.8%; Score 176.6; DB 3; Length 1783;
Best Local Similarity 52.6%; Pred. No. 4.9e-31;
Matches 408; Conservative 0; Mismatches 364; Indels 3; Gaps 1;

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QY      42 GTATGTTGGGCTTACCGGCTGGAGAGACGCTGGGCAAGGGGCGACAGAGTCTGTGA 101
Db      34 GAAGATCGGACACTGATGCTGTGGCGACACGCTGGGCGTGGCACTTGGGAAAGTGA 93
QY      102 GCTGGGGGTTCACTGCGTCACTGCGAGAGGTGGCATCAAGATCGTCAACCGTGAGA 161
Db      94 GATTGAGAACATCAATTAACAGGCCATTAAGTGGAGTTAAATCTTAAATAGACAGA 153
QY      162 GCTGAGCACTGCTGTGATG---AAGTGGAGCGGAGATCGGATCTGAAGTCTAT 218

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Db 154 GATTGCGATTAGATGTGTGGAAAAATTAACGAGAAATCAAAATCAAAACTCTT 213  
QY 219 TGAGACACCCACACCTCTTAAGCTGCAAGAGTTATGAAAACAAAATATTTGTACT 278  
Db 214 TCGTATCTCTATATTAACAACCTATACAGGTGATCAGCACTCCAAACAGATTTTAT 273  
QY 279 GGTGCTAGAACACCTGTGAGGTGAGCTCTTGACTACCTGGTGAAGAAGGAGGCT 338  
Db 274 GGTATGGAATATGTGTGTGAGGTGAAATATTGACTACATCTGTAGCATGAGACGGT 333  
QY 339 GACGCTTAAGAGGCTGGAAATTTCTTCGGCAGATCATCTGCGCTGACTTTCGA 398  
Db 334 TGAAGATGGAAGCCAGGCGGCTCTTCAGCAGATTCGTGCTGTGATTACTGTCA 393  
QY 399 CAGCCACTCCATATGCCACAGGATCTGAACCTGAACCTGAAACCTGCTGAGCAGAAAG 458  
Db 394 TAGGCATATGTGTGTTCATGAGACCTGMAACAGAGATGTCTGTGATGACACAT 453  
QY 459 CAACATCGCATGCGAAGCTTTGGCATGGCGTCCCTGAGGTTGGCGACAGCCTGTGA 518  
Db 454 GAATGCCAAGATAGCCGATTTGGATATCTAATATGATGTCAGATGTGAATTTCTGAG 513  
QY 519 GACGAGCTGTGGTCCCCCACTACGCTGCCCCGAGGTGATCCGGGGGAGAAATGA 578  
Db 514 AACTAGTTGCGATCTCAAAATTATGCAACCTGAAGTCATCTCAAGCATTTGATGC 573  
QY 579 CGGCCGAGAGCGGACGTGTGAGCTGCGGCGTATCTGTGCTTGTGCTGTGGGAGC 638  
Db 574 AGGTCTGAGTGTATCTGAGCTGTGTGTATCTGTATGCTCTTGTGTGGCAC 633  
QY 639 TCTGCCCTTGCAGCATACAACTTGGCAGCTGTGAGAGGTGAAGCGGCGCTGT 698  
Db 634 CCTCCATTGATGATGAGCATGTACCTACGTATTAAAGATCCGAGGGGTGTCTT 693  
QY 699 CCAATGCGGCACTTTATCCCGCCGACTGCCAGAGTCTGTAAGGGGCAATGATCGAGGT 758  
Db 694 TTATATCCAGATATCTCAATGCTGTGCGCACCTCTGATGATATGCTGCAGGT 753  
QY 759 GGAAGCCGACAGCGGCTCAAGCTAGACACATTCAGAAAACACATATGTATATA 813  
Db 754 TGACCCACTGAAAGCACTATCAAGACATAGAGCATGAATGTTTAA 808

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GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 5, 2004, 08:35:27 ; Search time 657 Seconds

(without alignments)  
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Searched: 3222919 seqs, 2451570024 residues

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Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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4	1993	99.3	3364	15	US-10-195-072-3
5	1993	99.3	3364	15	US-10-195-071-3
6	1966	98.0	2647	13	US-10-362-892-42
7	1966	98.0	2647	16	US-10-288-798-42
8	1941.2	96.7	2025	15	US-10-283-247-1
9	1939.6	96.6	2025	9	US-09-842-582-3
10	1939.6	96.6	2219	9	US-09-842-582-1
11	1827	91.0	1827	14	US-10-054-579-3
12	1777.4	88.6	3791	13	US-10-425-114-26842
13	1685.2	84.0	1911	15	US-10-283-247-4
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16	965	48.1	2980	13	US-10-423-543-10	Sequence 10, Appli
17	965	48.1	2980	15	US-10-354-358-91	Sequence 91, Appli
18	964.4	48.1	2897	17	US-10-311-034-43	Sequence 43, Appli
19	851.4	42.4	2112	15	US-10-116-326-5	Sequence 5, Appli
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25	409.8	20.4	1949	13	US-10-425-114-26847	Sequence 26847, A
26	291.6	14.5	512	9	US-09-960-253-87	Sequence 87, Appli
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29	265	13.2	1594	15	US-10-284-060-3	Sequence 3, Appli
30	264.2	13.2	1549	13	US-10-016-248-23	Sequence 23, Appli
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33	264.2	13.2	2462	13	US-10-363-616-158	Sequence 158, App
34	264.2	13.2	3226	15	US-10-161-565-23	Sequence 23, Appli
35	264.2	13.2	3269	16	US-10-288-106-34	Sequence 34, Appli
36	264.2	13.2	3312	17	US-10-276-645-3	Sequence 3, Appli
37	264.2	13.2	3392	17	US-10-276-645-3	Sequence 17, Appli
38	264.2	13.2	3451	13	US-10-425-114-26513	Sequence 26513, A
39	264.2	13.2	4917	15	US-10-161-565-22	Sequence 22, Appli
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42	262.4	13.1	3250	17	US-10-276-645-2	Sequence 2, Appli
43	252.4	12.6	2352	9	US-09-815-915-3	Sequence 3, Appli
44	252.4	12.6	2352	15	US-10-393-316-3	Sequence 3, Appli
45	252.4	12.6	2968	9	US-09-815-915-1	Sequence 1, Appli

## ALIGNMENTS

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RESULT 1
US-10-054-579-1
; Sequence 1, Application US/10054579
; Publication No. US20020137913A1
; GENERAL INFORMATION:
; APPLICANT: Turner, C. Alexander Jr.
; TITLE OF INVENTION: No. US20020137913A1 Human Kinases and Polynucleotides Encoding
; FILE REFERENCE: LEX-0300-USA
; CURRENT APPLICATION NUMBER: US/10/054,579
; PRIOR APPLICATION NUMBER: 2002-01-22
; PRIOR FILING DATE: 2001-01-23
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 2007
; TYPE: DNA
; ORGANISM: homo sapiens
US-10-054-579-1
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Query Match 100.0%; Score 2007; DB 14; Length 2007;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 2007; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	ATGACATCGACGGGGAAGGACGGCGCGGACGACGCGGACGATATGTTGGGCTTACCGG	60
DB	1	ATGACATCGACGGGGAAGGACGGCGCGGACGACGCGGACGATATGTTGGGCTTACCGG	60
QY	61	CTGGAGAAAGCCTGGGCAAGGGGACAGACAGGTCTGTGATAGCTGGGGTTCACTGCCTC	120
DB	61	CTGGAGAAAGCCTGGGCAAGGGGACAGACAGGTCTGTGATAGCTGGGGTTCACTGCCTC	120
QY	121	ACCTGCGAAGAGGTGGCCATCAAGATCGTCAACGCTGAGAAAGCTCAGGAGTGGTGTG	180
DB	121	ACCTGCGAAGAGGTGGCCATCAAGATCGTCAACGCTGAGAAAGCTCAGGAGTGGTGTG	180

181 ATGAAGTGAAGCGGAGATCGCATCTTGAAGCTATTGAGCAACCCCAAGCTTCTTAAG 240  
 181 ATGAAGTGAAGCGGAGATCGCATCTTGAAGCTATTGAGCAACCCCAAGCTTCTTAAG 240  
 241 CTGACACACCTTTTGAACCAAAATATTTGACCTGGTGTGAGAACAGTGTAGGT 300  
 241 CTGACACACCTTTTGAACCAAAATATTTGACCTGGTGTGAGAACAGTGTAGGT 300  
 301 GGTGAGCTCTTGAACCTTCTGCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAG 360  
 301 GGTGAGCTCTTGAACCTTCTGCTGCTGAGAGAGAGAGAGAGAGAGAGAGAGAG 360  
 361 TTCTCCGAGAGATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 420  
 361 TTCTCCGAGAGATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 420  
 421 GATCTGAACCTTGAACCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 480  
 421 GATCTGAACCTTGAACCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 480  
 481 GGCATGAGCTCTTGAACCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 540  
 481 GGCATGAGCTCTTGAACCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 540  
 541 TACGCTGAGCTCTTGAACCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 600  
 541 TACGCTGAGCTCTTGAACCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 600  
 601 AGCTGAGCTCTTGAACCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660  
 601 AGCTGAGCTCTTGAACCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660  
 661 TTGCGACAGCTCTTGAACCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 720  
 661 TTGCGACAGCTCTTGAACCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 720  
 721 CCCGACGAGCTCTTGAACCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 780  
 721 CCCGACGAGCTCTTGAACCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 780  
 781 CTGAGGACATTTGAGAACCAATATTTGAGAGAGAGAGAGAGAGAGAGAGAGAG 840  
 781 CTGAGGACATTTGAGAACCAATATTTGAGAGAGAGAGAGAGAGAGAGAGAGAG 840  
 841 CAGCCATTTCTGAG 900  
 841 CAGCCATTTCTGAG 900  
 901 GACGCTGAG 960  
 901 GACGCTGAG 960  
 961 GACGCTGAG 1020  
 961 GACGCTGAG 1020  
 1021 AAAAG 1080  
 1021 AAAAG 1080  
 1081 CCGGAG 1140  
 1081 CCGGAG 1140  
 1141 AAATCATGAG 1200  
 1141 AAATCATGAG 1200  
 1201 ATTGAG 1260  
 1201 ATTGAG 1260  
 1261 TCACACAG 1320

1261 TCACACAG 1320  
 1321 CTCCCAACCCCAAG 1380  
 1321 CTCCCAACCCCAAG 1380  
 1381 AACCCCAACCCCAAG 1440  
 1381 AACCCCAACCCCAAG 1440  
 1441 TCATCAAG 1500  
 1441 TCATCAAG 1500  
 1501 ACAG 1560  
 1501 ACAG 1560  
 1561 TGGTTGGAG 1620  
 1561 TGGTTGGAG 1620  
 1621 AAACCTGAG 1680  
 1621 AAACCTGAG 1680  
 1681 AGCCACAG 1740  
 1681 AGCCACAG 1740  
 1741 GCGGTGTTGAG 1800  
 1741 GCGGTGTTGAG 1800  
 1801 GCGGAG 1860  
 1801 GCGGAG 1860  
 1861 CGCTTCAAG 1920  
 1861 CGCTTCAAG 1920  
 1921 GCGGAG 1980  
 1921 GCGGAG 1980  
 1981 AAATGTGAG 2007  
 1981 AAATGTGAG 2007  
 1981 AAATGTGAG 2007

RESULT 2  
 US-10-195-072-1  
 ; Sequence 1, Application US/10195072  
 ; Publication No. US2003092036A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Origene Technologies  
 ; TITLE OF INVENTION: Full-Length Serine Protein Kinase in Brain and Pancreas  
 ; FILE REFERENCE: 16U 101 C2  
 ; CURRENT APPLICATION NUMBER: US/10/195,072  
 ; CURRENT FILING DATE: 2002-07-15  
 ; PRIOR APPLICATION NUMBER: US 09/930,181  
 ; PRIOR FILING DATE: 2001-08-16  
 ; NUMBER OF SEQ ID NOS: 18  
 ; SOFTWARE: Patentin Version 3.1  
 ; SEQ ID NO 1  
 ; LENGTH: 2908  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: (106)..(2112)

## OTHER INFORMATION:

US-10-195-072-1

Query Match 99.9%; Score 2005.4; DB 15; Length 2908;

Best Local Similarity 100.0%; Pred. No. 0;

Matches 2006; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGATCATGACGGGGAGAGACGCGCGCCGACGACCGCGCATGTTGG3CCCTTACCGG 60  
 DB 106 ATGATCATGACGGGGAGAGACGCGCGCGCGACGACCGCATGTTGG3CCCTTACCGG 165  
 QY 61 CTGAGAGAGACGCTGGGCAAGGGGACAGAGTGTGTGAAGCTGGGGGTTTCACTGGCTC 120  
 DB 166 CTGAGAGAGACGCTGGGCAAGGGGACAGAGTGTGTGAAGCTGGGGGTTTCACTGGCTC 225  
 QY 121 ACCTGCCAGAGAGTGGCCATCATAGATCGTCAACCGTGAAGGCTCAGCGAGTGGTCTG 180  
 DB 226 ACCTGCCAGAGAGTGGCCATCATAGATCGTCAACCGTGAAGGCTCAGCGAGTGGTCTG 285  
 QY 181 ATGAGAGTGAAGCGGGAGATCGCGATCTGTAAGCTCATTTAGACACCCCGCTCTTAAG 240  
 DB 286 ATGAGAGTGAAGCGGGAGATCGCGATCTGTAAGCTCATTTAGACACCCCGCTCTTAAG 345  
 QY 241 CTGACACGCTTTATGAAAAAATAATTTTGTACCTGGTGTAGAACAGTGTCAAGT 300  
 DB 346 CTGACACGCTTTATGAAAAAATAATTTTGTACCTGGTGTAGAACAGTGTCAAGT 405  
 QY 301 GGTAGCTCTTTCAGCTACCTGTGTGAAGAGGGAGGCTGACGCTTAAAGAGGCTCGGAG 360  
 DB 406 GGTAGCTCTTTCAGCTACCTGTGTGAAGAGGGAGGCTGACGCTTAAAGAGGCTCGGAG 465  
 QY 361 TTCTTCCGGAGATCATCTGCGCTGATCTTTCGACAGCCCATCATATGCGACAGG 420  
 DB 466 TTCTTCCGGAGATCATCTGCGCTGATCTTTCGACAGCCCATCATATGCGACAGG 525  
 QY 421 GATCTGAAACCTGTAACCTCTGCTGAGAGAGAAACAACATCCGATCGAGACTTT 480  
 DB 526 GATCTGAAACCTGTAACCTCTGCTGAGAGAGAAACAACATCCGATCGAGACTTT 585  
 QY 481 GGCATGGCGTCCCTGCGAGTGTGGGAGACGCTGTGTGAACAGCTGTGGTCCCGCCAC 540  
 DB 586 GGCATGGCGTCCCTGCGAGTGTGGGAGACGCTGTGTGAACAGCTGTGGTCCCGCCAC 645  
 QY 541 TACGCTGCGCCGAGGTGATCCGGGGGAGAGATGATACGCGGAGGCGGAGCGTGTGG 600  
 DB 646 TACGCTGCGCCGAGGTGATCCGGGGGAGAGATGATACGCGGAGGCGGAGCGTGTGG 705  
 QY 601 AGCTGCGGCGCTCATCTGTTGCTTGTGTGGGGGCTCTGCCCTTCAAGATGACAC 660  
 DB 706 AGCTGCGGCGCTCATCTGTTGCTTGTGTGGGGGCTCTGCCCTTCAAGATGACAC 765  
 QY 661 TTGCGACAGCTGTGAGAGAGTGAAGCGGGGCGTGTTCACATGACCGCACTTATCCG 720  
 DB 766 TTGCGACAGCTGTGAGAGAGTGAAGCGGGGCGTGTTCACATGACCGCACTTATCCG 825  
 QY 721 CCCGACTGCGAGACTGTGCTACGGGGCATGATCGAGGTGAACGCGGACGCGCTTCAAG 780  
 DB 826 CCCGACTGCGAGACTGTGCTACGGGGCATGATCGAGGTGAACGCGGACGCGCTTCAAG 885  
 QY 781 CTAGAGCAATTTGAGAAACATATGATATATAGGGGGCAAGATGAGCCCGAACCAGAG 840  
 DB 886 CTAGAGCAATTTGAGAAACATATGATATATAGGGGGCAAGATGAGCCCGAACCAGAG 945  
 QY 841 CAGCCCATTTCTGCGCAAGGTGAGATCGCTCGTGGCCAGCCCTGAGAGCATGACCCC 900  
 DB 946 CAGCCCATTTCTGCGCAAGGTGAGATCGCTCGTGGCCAGCCCTGAGAGCATGACCCC 1005  
 QY 901 GACGTGCTGAGACAGATGCACTCACTGAGGCTGCTTCCAGACCGGCAACAAGCTGCGAG 960  
 DB 1006 GACGTGCTGAGACAGATGCACTCACTGAGGCTGCTTCCAGACCGGCAACAAGCTGCGAG 1065  
 QY 961 GACGTGCTGCTCGAGAGAGAACAGAGAGATGATTTTACTTCTCTCTGAGACCGG 1020

DB 1066 GACCTGCTGCTCCGAGAGAGAACACAGAGAAAGATGATTTACTTCTCTCTGAGACCGG 1125  
 QY 1021 AAGAGAAAGTACCAGGAGGAGAGATGAGACCTGCCCGCCGAGAGAGATAGACCTT 1080  
 DB 1126 AAGAGAAAGTACCAGGAGGAGAGATGAGACCTGCCCGCCGAGAGAGATAGACCTT 1185  
 QY 1081 CCCCGAAGCTGTGTGATCTCCCGATGCTGTAACCCGCGACAGGCAACCGGCGGCGAAGAGC 1140  
 DB 1186 CCCCGAAGCTGTGTGATCTCCCGATGCTGTAACCCGCGACAGGCAACCGGCGGCGAAGAGC 1245  
 QY 1141 AATTCATGAGAGTGTCTCAGCGTGAACGAGCGGCGCTCCCGGCTCTGCGCGCGGCGC 1200  
 DB 1246 AATTCATGAGAGTGTCTCAGCGTGAACGAGCGGCGCTCCCGGCTCTGCGCGGCGGCGC 1305  
 QY 1201 ATTGAGATGGCCCAAGACGCGCCAGAGGTCTCGGTCCATCATGAGCGTGTCTCTCAGGCTTT 1260  
 DB 1306 ATTGAGATGGCCCAAGACGCGCCAGAGGTCTCGGTCCATCATGAGCGTGTCTCTCAGGCTTT 1365  
 QY 1261 TCACACAGCCCACTCAGACGAGCCCGGGGTGACCCCTCAACCCCTCAACAGGGGCGAGTCCG 1320  
 DB 1366 TCACACAGCCCACTCAGACGAGCCCGGGGTGACCCCTCAACCCCTCAACAGGGGCGAGTCCG 1425  
 QY 1321 CTCCCAACCCCAAGGGGACACTGTGTCAACAGCCAAAGAGAGAGCCGCGTGGACGCGCC 1380  
 DB 1426 CTCCCAACCCCAAGGGGACACTGTGTCAACAGCCAAAGAGAGAGCCGCGTGGACGCGCC 1485  
 QY 1381 AACCCCAAGCCCGGTCAGCCCGCCAGCGTGGAGGGGTGCGCTGAGAGGGCGCGGCTCAAC 1440  
 DB 1486 AACCCCAAGCCCGGTCAGCCCGCCAGCGTGGAGGGGTGCGCTGAGAGGGCGCGGCTCAAC 1545  
 QY 1441 TCCATCAAGAAACAGCTTTCTGGGCTCACCCCGCTTCAACCGCGGAAACTGCAAGTTCCG 1500  
 DB 1546 TCCATCAAGAAACAGCTTTCTGGGCTCACCCCGCTTCAACCGCGGAAACTGCAAGTTCCG 1605  
 QY 1501 AGCGGAGAGATGTCCAACCTGAACCAAGAGTGTGCCAGAGCTGGCGAAGAGTCC 1560  
 DB 1606 AGCGGAGAGATGTCCAACCTGAACCAAGAGTGTGCCAGAGCTGGCGAAGAGTCC 1665  
 QY 1561 TGGTTGGGAACTTATCATGAGCTGGAAGAGAGAGAGATCTTGTGTGTCATCAAGAGC 1620  
 DB 1666 TGGTTGGGAACTTATCATGAGCTGGAAGAGAGAGAGATCTTGTGTGTCATCAAGAGC 1725  
 QY 1621 AAACCTCTGAGCTCATCAAGGCTGACATGTGACAGCCCTTCTGTGATTTCCAGTCTC 1680  
 DB 1726 AAACCTCTGAGCTCATCAAGGCTGACATGTGACAGCCCTTCTGTGATTTCCAGTCTC 1785  
 QY 1681 AGCCACAGGTGATCTCCCAACAGAGCTTCCGGGCGAGTCAAGGCCACGGGGGGGCGCA 1740  
 DB 1786 AGCCACAGGTGATCTCCCAACAGAGCTTCCGGGCGAGTCAAGGCCACGGGGGGGCGCA 1845  
 QY 1741 GCCGTGTTCAGAAAGCCGCTCAAGTTCAGAGTTGATATCACTTACAGGAGGCTGGAGAG 1800  
 DB 1846 GCCGTGTTCAGAAAGCCGCTCAAGTTCAGAGTTGATATCACTTACAGGAGGCTGGAGAG 1905  
 QY 1801 GCGGAGAGAGAGAGGAGATCTTACCTCGTCACTTCAACCTGCTTCAAGCCCGCAGCGT 1860  
 DB 1906 GCGGAGAGAGAGAGGAGATCTTACCTCGTCACTTCAACCTGCTTCAAGCCCGCAGCGT 1965  
 QY 1861 CGCTTCAAGAGGAGTGTGAGAGACATCAAGGCGGAGCTGTGAGACACACAGACCGGCT 1920  
 DB 1966 CGCTTCAAGAGGAGTGTGAGAGACATCAAGGCGGAGCTGTGAGAGACACACAGACCGGCT 2025  
 QY 1921 GCGGCGGAGAGCTTGTGAGACACCACTTATCTGTATGAGAAATGATGACGCGGCGGCTTTCC 1980  
 DB 2026 GCGGCGGAGAGCTTGTGAGACACCACTTATCTGTATGAGAAATGATGACGCGGCGGCTTTCC 2085  
 QY 1981 AAATGTGAATTTATCCCGAAGATTAA 2007  
 DB 2086 AAATGTGAATTTATCCCGAAGATTAA 2112

RESULT 3  
 US-10-195-071-1

Sequence 1, Application US/10195071  
Publication No. US20030096271A1  
GENERAL INFORMATION:  
APPLICANT: Origene Technologies  
TITLE OF INVENTION: Full-Length Serine Protein Kinase in Brain and Pancreas  
FILE REFERENCE: 16U 101 C1  
CURRENT APPLICATION NUMBER: US/10/195,071  
PRIOR FILING DATE: 2002-07-15  
PRIORITY APPLICATION NUMBER: US 09/930,181  
PRIOR FILING DATE: 2001-08-16  
NUMBER OF SEQ ID NOS: 18  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO: 1  
LENGTH: 2908  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (106)..(2112)  
OTHER INFORMATION:  
US-10-195-071-1

Query Match 99.9%; Score 2005.4; DB 15; Length 2908;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 2006; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGACATCGACGGGAAAGACGGGGCGCCGACGACGGAGTATGTGGCCCTACCGG 60  
Db 106 ATGACATCGACGGGAAAGACGGGGCGCCGACGACGGAGTATGTGGCCCTACCGG 165  
QY 61 CTGAGAAGACGCTGGGCAAGGGGACAGACAGTCTGTGTAAGCTGGGGGTTCACTGGTC 120  
Db 166 CTGAGAAGACGCTGGGCAAGGGGACAGACAGTCTGTGTAAGCTGGGGGTTCACTGGTC 225  
QY 121 ACCTGCCAAGAGTGGCCATCAATGCTCAACCTGTGAAGCTCACAGTGGTGGTCTG 180  
Db 226 ACCTGCCAAGAGTGGCCATCAATGCTCAACCTGTGAAGCTCACAGTGGTGGTCTG 285  
QY 181 ATGAAGGTGAGCGGGAGATCGCGATCCTGAAGCTCATTGAGCAACCCCAAGTCTTAAG 240  
Db 286 ATGAAGGTGAGCGGGAGATCGCGATCCTGAAGCTCATTGAGCAACCCCAAGTCTTAAG 345  
QY 241 CTGACAGCGTTTATGAAAACAAAATATTTGTAACCTGGTGTCTAGAACACGTGTCAAGT 300  
Db 346 CTGACAGCGTTTATGAAAACAAAATATTTGTAACCTGGTGTCTAGAACACGTGTCAAGT 405  
QY 301 GGTGAGCTCTCGACTACCTGTGTGAAGAGGGAGGCTGACGCTTAAGAGAGCTCGAAG 360  
Db 406 GGTGAGCTCTCGACTACCTGTGTGAAGAGGGAGGCTGACGCTTAAGAGAGCTCGAAG 465  
QY 466 GTGTGCTCTTGACTACCTGTGTGAAGAGGGAGGCTGACGCTTAAGAGAGCTCGAAG 525  
Db 526 GTGTGCTCTTGACTACCTGTGTGAAGAGGGAGGCTGACGCTTAAGAGAGCTCGAAG 585  
QY 585 GATTCGAAACCTGAAAACCTCTCTGTGACGAAAGAAACAATCCGATGCGACATTT 640  
Db 641 GATTCGAAACCTGAAAACCTCTCTGTGACGAAAGAAACAATCCGATGCGACATTT 705  
QY 705 GATTCGAAACCTGAAAACCTCTCTGTGACGAAAGAAACAATCCGATGCGACATTT 760  
Db 766 GATTCGAAACCTGAAAACCTCTCTGTGACGAAAGAAACAATCCGATGCGACATTT 825

QY 721 CCCGACTGCGAGAGCTCTGTAAGGGGACATGATGAGGTGAGCGCCGACGCGCTCACG 780  
Db 826 CCCGACTGCGAGAGCTCTGTAAGGGGACATGATGAGGTGAGCGCCGACGCGCTCACG 885  
QY 781 CTAGAGCATTTCAGAAAACATATGTATATAGGGGGCAAGATGAGCCCGAACAGAG 840  
Db 886 CTAGAGCATTTCAGAAAACATATGTATATAGGGGGCAAGATGAGCCCGAACAGAG 945  
QY 841 CAGCCCATCTCTCGCAAGGTGACATCCGCTCGCTCGCCAGCCGAGGAGGACATGACCCC 900  
Db 946 CAGCCCATCTCTCGCAAGGTGACATCCGCTCGCTCGCCAGCCGAGGAGGACATGACCCC 1005  
QY 901 GACGTGCTGACAGCATCACTCACTGGGCTGCTTCGAGACCGCAACAGCTGCTGAG 960  
Db 1006 GACGTGCTGACAGCATCACTCACTGGGCTGCTTCGAGACCGCAACAGCTGCTGAG 1065  
QY 961 GACGTGCTGCTCGAGAGAGAGAACCAAGAGAGATTTATCTTCCTCTCTGAGACCGG 1020  
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QY 1021 AAAGAAAGTACCCGAGCGAGAGATGAGACCTGCCCGGAAAGAGATGACCT 1080  
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QY 1081 CCCCAGAAAGCTGTGACTCCCGATGCTGAACCGGCAACCGCAACCGCGGCGCAAGACGC 1140  
Db 1186 CCCCAGAAAGCTGTGACTCCCGATGCTGAACCGGCAACCGGCAACCGCGGCGCAAGACGC 1245  
QY 1141 AAATCATTGAGAGTCTAGAGGTGACGAGCGAGGCTCCCGGAGCTGACCGCGGAGC 1200  
Db 1246 AAATCATTGAGAGTCTAGAGGTGACGAGCGAGGCTCCCGGAGCTGACCGCGGAGC 1305  
QY 1201 ATTGAGATGAGCCACAGCGGCGAGAGTCTGGTTCATCAGCGGTGCTCTCAGGCTT 1260  
Db 1306 ATTGAGATGAGCCACAGCGGCGAGAGTCTGGTTCATCAGCGGTGCTCTCAGGCTT 1365  
QY 1261 TCACACAGCCACTAGAGAGCCCGGGTGAACCCCTACCCCTCAACAAAGGGGAGTCC 1320  
Db 1366 TCACACAGCCACTAGAGAGCCCGGGTGAACCCCTACCCCTCAACAAAGGGGAGTCC 1425  
QY 1321 CTCCCAACCCCAAGGGAGCACTGTCCACACGCCCAAGAGAGAGCCCGGTGAGACGCGC 1380  
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QY 1381 AACCCACGCCCCCGCTCAAGCCCAAGGCTCGAGGGGTGCTCTGAGGGCGCGCTCAAC 1440  
Db 1486 AACCCACGCCCCCGCTCAAGCCCAAGGCTCGAGGGGTGCTCTGAGGGCGCGCTCAAC 1545  
QY 1441 TCATCAAGAACAGCTTTCTGGGCTCACCCGCTTCCACCGCCGGAACCTCAAGTTCCG 1500  
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Db 1606 ACGCGAGAGAGATGCCAATCTGACACCAAGATGCTGCCCAAGCTGCGGAAGATCC 1665  
QY 1561 TGGTTGGGAATTTATACAGCTGAGAGAGAGAGAGAGATCTTGTGTATCAAAAGAC 1620  
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QY 1621 AAACCTGTAGCTTCATCAAGGCTGACATGTGACGCGCTTCTGATTCGATTCGAGTCTC 1680  
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QY 1681 AGCCACAGGTGATCTCCCAACAGAGCTTCGGGGCGAGTCAAGAGCAAGGGGGGGCCA 1740  
Db 1786 AGCCACAGGTGATCTCCCAACAGAGCTTCGGGGCGAGTCAAGAGCAAGGGGGGGCCA 1845  
QY 1741 GCGGTGTCAGAAAGCGGTCAAGTTCAGGTTGATATCACTCAACGAGAGGTGGAGAG 1800  
Db 1846 GCGGTGTCAGAAAGCGGTCAAGTTCAGGTTGATATCACTCAACGAGAGGTGGAGAG 1905



Qy	1801	CGCGAAGAGAGAA	CGGCATCTACCTCCGTACCTTCA	CCCTGCTCTCAGGCCCCAGCCGT	1867
Qy	1906	GCGCAGAAAGAGAA	CGGCATCTACCTCCGTACCTTCA	CCCTGCTCTCAGGCCCCAGCCGT	1955
Qy	1861	CGTTTCAAGAGGGTGTGAG	CCATCCAGGCCAGCTGCTGAGCACA	CAGACCCGCTT	1920
Qy	1966	CGTTTCAAGAGGGTGTGAG	CCATCCAGGCCAGCTGCTGAGCACA	CAGACCCGCTT	2023
Qy	1971	GCGGCCGACGACTTGTGACA	CACCACTAACTGTATGAGAAATGATACA	CGGGGCGGCTTCC	1983
Qy	2026	GCGGCCGACGACTTGTGACA	CCACTAACTGTATGAGAAATGATACA	CGGGGCGGCTTCC	2083
Qy	1981	AAATGTGAATTTATCCG	AAAAAGTTAA	2007	
Qy	2086	AAATGTGAATTTATCCG	AAAAAGTTAA	2112	

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RESULT 4
US-10-195-072-3
; Sequence 3, Application US/10195072
; Publication NO. US2003092036A1
; GENERAL INFORMATION:
; APPLICANT: Origene Technologies
; TITLE OF INVENTION: Full-Length Serine Protein Kinase in Brain and Pancreas
; FILE REFERENCE: 16U 101 C2
; CURRENT APPLICATION NUMBER: US/10/195,072
; CURRENT FILING DATE: 2002-07-15
; PRIOR APPLICATION NUMBER: US 09/930,181
; PRIOR FILING DATE: 2001-08-16
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 3364
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (482)..(2239)
; OTHER INFORMATION:
US-10-195-072-3

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Query Match	99.3%	Score 1993;	DB 15;	Length 3364;
Best Local Similarity	99.8%;	Pred. No. 0;		
Matches 2007; Conservative	0;	Mismatches 0;	Indels 4;	Gaps 1

Qy	ATGACATCGACGGGAGAAAGACGGCGCGCGACAGCAACGGACAGTATGTTGGCCCTTACCGG	60
Db	229 ATGACATCGACGGGAGAAAGACGGCGCGCGACAGCAACGGACAGTATGTTGGCCCTTACCGG	2888
Qy	61 CTGAGAGAAAGCGCTGGGCAAGGGGCGACAGGCTTGTTGAAGCTTGGGGTTCACTGGCTC	120
Db	289 CTGAGAGAAAGCGCTGGGCAAGGGGCGACAGGCTTGTTGAAGCTTGGGGTTCACTGGCTC	348
Qy	121 ACTGCGCAAGAAAGGTGGCCATCAAGATCGTCAACCGTGAGAACTCAGCGAGTCCGTGCTG	180
Db	349 ACTGCGCAAGAAAGGTGGCCATCAAGATCGTCAACCGTGAGAACTCAGCGAGTCCGTGCTG	408
Qy	181 ATGAAAGTGGAGGGGGAGATCGGATCGCTGAAAGCTCATTTGAGCAACCCCAAGCTCTTAAG	240
Db	409 ATGAAAGTGGAGGGGGAGATCGGATCGCTGAAAGCTCATTTGAGCAACCCCAAGCTCTTAAG	468
Qy	241 CTGCACGACGTTTATGAAAAAATAATTTT---GTACTGGTGCTAGAACACGCTC	296
Db	469 CTGCACGACGTTTATGAAAAAATAATTTTGTAGGTAACCTGGTGCTAGAACACGCTC	528
Qy	297 AGGTGGTGAAGCTCTTGACCTACTGCTGAAGAAAGGGAGGCTGACGCTTAAGAGGCTCG	356
Db	529 AGGTGGTGAAGCTCTTGACCTACTGCTGAAGAAAGGGAGGCTGACGCTTAAGAGGCTCG	588
Qy	357 GAAGTCTTTCGGGCAAGTCACTCTGCGCTGGACCTTCTGCACAACGCACTCCATATGCCA	416
Db	589 GAAGTCTTTCGGGCAAGTCACTCTGCGCTGGACCTTCTGCACAACGCACTCCATATGCCA	648

QY	417	CAGGATTTGAAACCTGTGAAACCTCTCTGAGACAGAAAGAAACAATCCGATGCGAGA	476
Db	649	CAGGATTTGAAACCTGTGAAACCTCTCTGAGACAGAAAGAAACAATCCGATGCGAGA	708
QY	477	CTTTGGCATTGGCGTTCCTGTGACAGTTTGCGACAGCCTGTGTGAGACCAACTGTGGTCCCC	536
Db	709	CTTTGGCATTGGCGTTCCTGTGACAGTTTGCGACAGCCTGTGTGAGACCAACTGTGGTCCCC	768
QY	537	CCACTATGCGCTGCCCCGAGGTGATCCGGGGGGGAGAAAGTATAGACGCGCGGAAAGGCGGAGT	596
Db	769	CCACTATGCGCTGCCCCGAGGTGATCCGGGGGGGAGAAAGTATAGACGCGCGGAAAGGCGGAGT	828
QY	597	GTGAGAGCTGCGCGCTCATCTGTTCGCTTTCCTGATGGGGGCTCTGCCCTTGACGATGA	656
Db	829	GTGAGAGCTGCGCGCTCATCTGTTCGCTTTCCTGATGGGGGCTCTGCCCTTGACGATGA	888
QY	657	CAACTTGGGACGCTGCTGTGAGAAAGTGAAGCCGGGGGTGTTTCCATATGCCCGCACTTAT	716
Db	889	CAACTTGGGACGCTGCTGTGAGAAAGTGAAGCCGGGGGTGTTTCCATATGCCCGCACTTAT	948
QY	717	CCCGCCGCACTGCGCAGAGTCTGCTACGGGGGCGATGATCGAGGTGACGCGCAGCGCGCT	776
Db	949	CCCGCCGCACTGCGCAGAGTCTGCTACGGGGGCGATGATCGAGGTGACGCGCAGCGCGCT	1000
QY	777	CACGCTAGAGCATTGAAAGACATATGTGTATATAGGGGGCAAGATGAGCCCGAAC	836
Db	1009	CACGCTAGAGCATTGAAAGACATATGTGTATATAGGGGGCAAGATGAGCCCGAAC	1068
QY	837	AGAGCAGCCCATTCCTGSCAGAGTGGAGATCCGCTCGCTGCCACGCTCGAGGACATGA	896
Db	1069	AGAGCAGCCCATTCCTGSCAGAGTGGAGATCCGCTCGCTGCCACGCTCGAGGACATGA	1122
QY	897	CCCCGACGTGTGAGACAGCATGCACTCACTGAGCTGTTCCGAGACCGCAACAAGTCT	956
Db	1129	CCCCGACGTGTGAGACAGCATGCACTCACTGAGCTGTTCCGAGACCGCAACAAGTCT	1188
QY	957	GCAGAGCCTGCTGTCCGAGAGGAGAACACAGAGAAAGATATATTACTCTCTCTCTGGA	1012
Db	1189	GCAGAGCCTGCTGTCCGAGAGGAGAACACAGAGAAAGATATATTACTCTCTCTCTGGA	1244
QY	1017	CCGGAAGAAAGTATACCGGACCCAGAGAGATGAGGACTCGCCCCCGCGGAACGAGATAGA	1076
Db	1249	CCGGAAGAAAGTATACCGGACCCAGAGAGATGAGGACTCGCCCCCGCGGAACGAGATAGA	1308
QY	1077	CCCTTCCCGGAGCGTGTGATCTCCCGATGCTGAACCGGCAACGCGCGGCGCAGA	1133
Db	1309	CCCTTCCCGGAGCGTGTGATCTCCCGATGCTGAACCGGCAACGCGCGGCGCAGA	1366
QY	1137	ACGCAAAATTCATGAGAGGTGCTCACGCTGACACGAGACGAGCGCGCTCCGCTCTCTGAG	1198
Db	1369	ACGCAAAATTCATGAGAGGTGCTCACGCTGACACGAGACGAGCGCGCTCCGCTCTCTGAG	1422
QY	1197	GGCCATTGAGATGGCCCAAGCACGGCGCAAGGTCTCGTTCATCAACGCGTGCCTCTCAGG	1256
Db	1429	GGCCATTGAGATGGCCCAAGCACGGCGCAAGGTCTCGTTCATCAACGCGTGCCTCTCAGG	1488
QY	1257	CGTTTTCACACGCCCCCATCAGAGACCCCCCGGGTAAACCTTCAACCCCTCAACAAAGGGAG	1316
Db	1489	CGTTTTCACACGCCCCCATCAGAGACCCCCCGGGTAAACCTTCAACCCCTCAACAAAGGGAG	1544
QY	1317	TCCCTTCCCAACCCCAAGGGGACACTGTTCACACGCAAAAGGAGAGCCGCGTGGCAC	1376
Db	1549	TCCCTTCCCAACCCCAAGGGGACACTGTTCACACGCAAAAGGAGAGCCGCGTGGCAC	1608
QY	1377	GCCCAACCCCAACGCCCCCGTTCAGCCTCCAGGTGAGAGGGTGCCTTGAAGGGCGCGGCT	1433
Db	1609	GCCCAACCCCAACGCCCCCGTTCAGCCTCCAGGTGAGAGGGTGCCTTGAAGGGCGCGGCT	1666
QY	1437	CAACTCCATCAAGAAAGACTTTCTGGGCTCACCCGCTTCCACGCGCGGAAACTGCAAGT	1496
Db	1669	CAACTCCATCAAGAAAGACTTTCTGGGCTCACCCGCTTCCACGCGCGGAAACTGCAAGT	1728
QY	1497	TCCGACGCGGAGAGATGTCACACTTGACACAGAGTCTGCCACAGACTGGCGAGAGAA	1556



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Db 1429 GGCCATTGAGATGCGCCAGACGGCCAGAGGTCTGGTTCATCAGCGGTGCTCTCCAGG 1488
QY 1257 CCTTTCACGAGCCCACTCAGACAGCCCCGGGATGACCCCTCAGCCCTCAGCAAGGGGAG 1316
Db 1489 CCTTTCACGAGCCCACTCAGACAGCCCCGGGATGACCCCTCAGCCCTCAGCAAGGGGAG 1548
QY 1317 TCCCTCTCCCAACCCCAAGGGGAGACCTGTTCACACGCCCAAGAGAGCCCGCTGGAC 1376
Db 1549 TCCCTCTCCCAACCCCAAGGGGAGACCTGTTCACACGCCCAAGAGAGCCCGCTGGAC 1608
QY 1377 GCCCAACCCCAAGCCCGCTTCACAGCCCGGATGAGAGGGGTGCCCTGAGAGGGGCGGCT 1436
Db 1609 GCCCAACCCCAAGCCCGCTTCACAGCCCGGATGAGAGGGGTGCCCTGAGAGGGGCGGCT 1668
QY 1437 CAATCCATCAGAGAACAGCTTTCTGGGCTCAGCCCGCTTCACCGCGGAAACTGCAAGT 1496
Db 1669 CAATCCATCAGAGAACAGCTTTCTGGGCTCAGCCCGCTTCACCGCGGAAACTGCAAGT 1728
QY 1497 TCCGAGCCGCGAGAGATGTCCAACTGACACCAAGATGCTCCCGAGAGCTGGCGAAAG 1556
Db 1729 TCCGAGCCGCGAGAGATGTCCAACTGACACCAAGATGCTCCCGAGAGCTGGCGAAAG 1788
QY 1557 GTCTGTGTTGGAACTTCACTCAGCTGAGAGAGAGAGAGATCTTCTGTCTCATCA 1616
Db 1789 GTCTGTGTTGGAACTTCACTCAGCTGAGAGAGAGAGAGATCTTCTGTCTCATCA 1848
QY 1617 AGACAACTCTGTAGCTTCATCAAGGCTGACATGTGTGACAGCTTCTGTCTCATCA 1676
Db 1849 AGACAACTCTGTAGCTTCATCAAGGCTGACATGTGTGACAGCTTCTGTCTCATCA 1908
QY 1677 TCTCAGCCACAGGCTCTCTCCCAAGAGCTTCCGGGGCGAGAGCAAGGCCAGCGGGAG 1736
Db 1909 TCTCAGCCACAGGCTCTCTCCCAAGAGCTTCCGGGGCGAGAGCAAGGCCAGCGGGAG 1968
QY 1737 GCCAGCCGTGTTCAGAGCCGCTCAAGTTCAGGTTGATATCACTTACACCTGAGAGGCTG 1796
Db 1969 GCCAGCCGTGTTCAGAGCCGCTCAAGTTCAGGTTGATATCACTTACACCTGAGAGGCTG 2028
QY 1797 GGAGGCGCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1856
Db 2029 GGAGGCGCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2088
QY 1857 CCGTGTCTTCAAGAGGGTGTGTGAGAGACATCAAGCCAGCTGTGAGACACAGACCC 1916
Db 2089 CCGTGTCTTCAAGAGGGTGTGTGAGAGACATCAAGCCAGCTGTGAGACACAGACCC 2148
QY 1917 GCGTGGCGCCCAAGACTTGTCAAGACACACTTAACTGTATGAAATGATGACGGGGCGCT 1976
Db 2149 GCGTGGCGCCCAAGACTTGTCAAGACACACTTAACTGTATGAAATGATGACGGGGCGCT 2208
QY 1977 TTCCAATGTGAATTTATCCCGAAAAGTTAA 2007
Db 2209 TTCCAATGTGAATTTATCCCGAAAAGTTAA 2239

RESULT 6
US-10-362-892-42
; Sequence 42, Application US/10362892
; Publication No. US20040038881A1
; GENERAL INFORMATION:
; APPLICANT: INCYTE GENOMICS, INC.; BANDMAN, Olga
; APPLICANT: NGUYEN, Daniel B.; WALITA, Nardine K.
; APPLICANT: HAFALIA, April J.A.; YAO, Montique G.
; APPLICANT: GANDHI, Ameena R.; GURURAJAN, Rajagopal
; APPLICANT: DING, Li; PATTERSON, Chandra S.
; APPLICANT: YUE, Henry; BAUGHN, Mariah R.
; APPLICANT: TRIBOULEY, Catherine M.; THORNTON, Michael B.
; APPLICANT: ELIOTT, Vicki S.; LU, Yan
; APPLICANT: TANG, Craig H.; AU-YOUNG, Janice K.
; APPLICANT: ISON, Y. Tom; AZIMZAI, Yalda
; APPLICANT: BURRILL, John D.; MARCUS, Gregory A.
; APPLICANT: ZINGER, Kurt A.; LU, Dzung Aina M.
; APPLICANT: LAM, Preeti G.; RAMKUMAR, Jayalaxmi
```

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; APPLICANT: WARREN, Bridget A.; KEARNEY, Liam
; APPLICANT: POLICKY, Jennifer L.; THANGAVALU, Kavitha
; APPLICANT: BURFORD, Neil
; TITLE OF INVENTION: HUMAN KINASES
; FILE REFERENCE: PF-0209 USN
; CURRENT APPLICATION NUMBER: US/10/362,892
; CURRENT FILING DATE: 2003-02-25
; PRIOR APPLICATION NUMBER: PCT/US01/27219
; PRIOR FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: US 60/229,873
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: US 60/231,357
; PRIOR FILING DATE: 2000-09-08
; PRIOR APPLICATION NUMBER: US 60/232,654
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: US 60/234,902
; PRIOR FILING DATE: 2000-09-22
; PRIOR APPLICATION NUMBER: US 60/236,499
; PRIOR FILING DATE: 2000-09-29
; PRIOR APPLICATION NUMBER: US 60/238,389
; PRIOR FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: US 60/240,542
; PRIOR FILING DATE: 2000-10-13
; NUMBER OF SEQ ID NOS: 48
; SOFTWARE: PERL Program
; SEQ ID NO 42
; LENGTH: 2647
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20040038881A1 4022651CB1
US-10-362-892-42

Query Match 98.0%; Score 1966; DB 13; Length 2647;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1966; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 42 GATATTTGGGGCCCTACCGGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 101
Db 30 GATATTTGGGGCCCTACCGGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 89
QY 102 GCTGGGGGTTCACTGCTGACCTGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 161
Db 90 GCTGGGGGTTCACTGCTGACCTGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 149
QY 162 GCTGACGAGTGGTGTGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 221
Db 150 GCTGACGAGTGGTGTGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 209
QY 222 GCACCCCAAGCTCTTAAGCTGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 281
Db 210 GCACCCCAAGCTCTTAAGCTGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 269
QY 282 GCTAAGACAGTGTAGAGTGTGAGCTTTGACTTACTGCTGTGAAAGAGAGAGAGAGAG 341
Db 270 GCTAAGACAGTGTAGAGTGTGAGAGCTTTGACTTACTGCTGTGAAAGAGAGAGAGAGAG 329
QY 342 GCTAAGAGAGCTGGAAGTCTTCCGAGATCATCTCTGGCTGAGAGAGAGAGAGAGAGAG 401
Db 330 GCTAAGAGAGCTGGAAGTCTTCCGAGATCATCTCTGGCTGAGAGAGAGAGAGAGAGAGAG 389
QY 402 CCACCTCATATGCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 461
Db 390 CCACCTCATATGCAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 449
QY 462 CATCCGATTCGAGAGCTTTGGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 521
Db 450 CATCCGATTCGAGAGCTTTGGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 509
QY 522 CAGCTGTGGGTGTCCTCCCACTACGCTGCGGAGGTGATCGGGGGAGAGAGAGAGAGAGAG 581
Db 510 CAGCTGTGGGTGTCCTCCCACTACGCTGCGGAGGTGATCGGGGGAGAGAGAGAGAGAGAG 569
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QY	582	CCGGAAGCGGACGCTGAGACCTGCGGCTGATCTCTGTGGCTTGTGCTGAGCGGAGGCTCT	641
Db	570	CCGGAAGCGGACGCTGAGACCTGCGGCTGATCTCTGTGGCTTGTGCTGAGCGGAGGCTCT	629
QY	642	GCCCTTGACGACATGACAACTTGCACAGCTGCTGAGAGAGGTGAAGCGGAGGCTTCCA	701
Db	630	GCCCTTGACGATGACAACTTGCACAGCTCTGAGAGAGGTGAAGCGGAGGCTTCCA	689
QY	702	CATGCGGACCTTATTCGCCGCCGACTGCGACAGTCTGTACGGGGACATGATCGAGGTGGA	761
Db	690	CATGCGGACCTTATTCGCCGCCGACTGCGACAGTCTGTACGGGGACATGATCGAGGTGGA	749
QY	762	CGCGGACGCGCGGCTCACTGCTAGAGCACTTCAGAAAACATATGATATATAGGGGCGAA	821
Db	750	CGCGGACGCGCGGCTCACTGCTAGAGCACTTCAGAAAACATATGATATATAGGGGCGAA	809
QY	822	GAATGAGCTCCGAAACAGAGCAGCCATTCTTCGCAAGGTGAGATCCGCTGCTGCCAG	881
Db	810	GAATGAGCTCCGAAACAGAGCAGCCATTCTTCGCAAGGTGAGATCCGCTGCTGCCAG	869
QY	882	CCTGAGGACATCGACCCCGACGTCGTGAGACATGACACTCATCGGAGCTTCCGAGA	941
Db	870	CCTGAGGACATCGACCCCGACGTCGTGAGACATGACACTCATCGGAGCTTCCGAGA	929
QY	942	CCGCAACAGCTGCTGCAGACCTGCTGTCCGAGAGGAGAACCAAGAGAAATGATTTA	1001
Db	930	CCGCAACAGCTGCTGCAGACCTGCTGTCCGAGAGGAGAACCAAGAGAAATGATTTA	989
QY	1002	CTTCTCTCTCTGTGACCGGAAAGAAAGGTACCCGACGAGAGATGAGACCTGCCCC	1061
Db	990	CTTCTCTCTCTGTGACCGGAAAGAAAGGTACCCGACGAGAGATGAGACCTGCCCC	1049
QY	1062	CCGGAACGAGATGACCTCTCCCGAGACGTGTGACTTCCCGATGCTGAAACGCGACAG	1121
Db	1050	CCGGAACGAGATGACCTCTCCCGAGACGTGTGACTTCCCGATGCTGAAACGCGACAG	1109
QY	1122	CAAGCGGCGGCGACGAAACGCAATCCATGAGAGTGTCAAGCTGACGAGCGGCTCCC	1181
Db	1110	CAAGCGGCGGCGACGAAACGCAATCCATGAGAGTGTCAAGCTGACGAGCGGCTCCC	1169
QY	1182	GGTGCTTCGCGGCGGCGCATTTAGATGAGCCGACGACCGGACGAGAGTCTGCTCATCAG	1241
Db	1170	GGTGCTTCGCGGCGGCGCATTTAGATGAGCCGACGACCGGACGAGAGTCTGCTCATCAG	1229
QY	1242	CGGTGCTCTCTCAGGCTTTTCCACAGGCGCACTCAGAGCGCCCGGGGTGACCCCTCACG	1301
Db	1230	CGGTGCTCTCTCAGGCTTTTCCACAGGCGCACTCAGAGCGCCCGGGGTGACCCCTCACG	1289
QY	1302	CTCACCAAGGCGCACTCCCTCCACCCCGCAAGGGAACACTGTCCACAGCGCAAGGA	1361
Db	1290	CTCACCAAGGCGCACTCCCTCCACCCCGCAAGGGAACACTGTCCACAGCGCAAGGA	1349
QY	1362	GAGCCCGGCTGGCAGCCCAACCCACGCCCCCTTCAGGCTCCAGGCTTCGAGGGGTGCC	1421
Db	1350	GAGCCCGGCTGGCAGCCCAACCCACGCCCCCTTCAGGCTCCAGGCTTCGAGGGGTGCC	1409
QY	1422	CTGAGAGGCGCGGCTCACTCATCAAAACAGCTTTGTGGCTCACCCCGCTTCCACCG	1481
Db	1410	CTGAGAGGCGCGGCTCACTCATCAAAACAGCTTTGTGGCTCACCCCGCTTCCACCG	1469
QY	1482	CCGGAACGCAAGTTCCGACGCGCGAGAGATGTCACCTGACACCAAGTCTGTCCC	1541
Db	1470	CCGGAACGCAAGTTCCGACGCGCGAGAGATGTCACCACTGACACCAAGTCTGTCCC	1529
QY	1542	AGAGCTGGGGAAGAGTCTGTGGGAACTTCATCAGCTCGAGAGAGAGACACAT	1601
Db	1530	AGAGCTGGGGAAGAGTCTGTGGGAACTTCATCAGCTCGAGAGAGAGACACAT	1589
QY	1602	CTTGTGTGATCAAAAGCAAACTCTGAGCTCAATCAAGCTGACATGTGTGACGCTT	1661
Db	1590	CTTGTGTGATCAAAAGCAAACTCTGAGCTCAATCAAGCTGACATGTGTGACGCTT	1649

Qy	1662	CCCTGTGCATTTCCCAAGTCTCAGCCACACAGTCATCTCCCAACGAGCTTCGGGGCCGAGTA	1721
Db	1650	CTGTTCATTTCCCAAGTCTCAGCCACACAGTCATCTCCCAACGAGCTTCGGGGCCGAGTA	1709
Qy	1722	CAAGGCCACGGGGGGGCCAAGCTGCTTCCAGAGAGCCCGTCAAGTTCAGAGTTGATATAC	1761
Db	1710	CAAGGCCACGGGGGGGGCCAGCCGCTTCCAGAGAGCCCGTCAAGTTCAGAGTTGATATAC	1769
Qy	1782	CTACACGAGAGGTGGGGAGGCGCAGAGAGAAAGGATCTACCTCCCTCAACCTT	1841
Db	1770	CTACACGAGAGGTGGGGAGGCGCAGAGAGAAAGGATCTACCTCCCTCAACCTT	1829
Qy	1830	GCTCTCAGGCCCCCAGCCGCTCCCTTCAAGAGGCTGTGTGAGACATCCAGGCCACGCTGCT	1889
Db	1902	GAGACACACGACCCCGGCTGGCGGCCAGCACTTGTCCAGACCACTAAGTATGAGAAAT	1961
Db	1890	GAGACACACGACCCCGGCTGGCGGCCAGCACTTGTCCAGACCACTAAGTATGAGAAAT	1949
Qy	1962	GATGACGGGGCGGCTTTCCAATGTGAAATTATTCGGAAGTTAA	2007
Db	1950	GATGACGGGGCGGCTTTCCAATGTGAAATTATTCGGAAGTTAA	1995
RESULT 7			
US-10-288-798-42			
; Sequence 42, Application US/10288798			
; Publication No. US20030207299A1			
GENERAL INFORMATION:			
APPLICANT: BANDMAN, Olga; NGUYEN, Daniel B.			
APPLICANT: WALIA, Natinder K.; HARPALIA, April J.A.;			
APPLICANT: YAO, Monique G.; GANDHI, Ameeta R.;			
APPLICANT: GURURAJAN, Rajagopal.; DING, Li;			
APPLICANT: PATTERSON, Chandra.; YUE, Henry;			
APPLICANT: BAUGHN, Mariah R.; TRIQUETRY, Catherine M.;			
APPLICANT: THORNTON, Michael.; ELIOTTY, Vicki S.;			
APPLICANT: LU Yan.; ISON, Craig H.;			
APPLICANT: AU-YOUNG, Janice.; TANG, Y. Tom;			
APPLICANT: AZIMZAI, Yalda.; BURRILL, John D.;			
APPLICANT: MARCUS, Gregory A.; ZINGLER, Kurt A.;			
APPLICANT: LU, Dying Aina M.; LAL, Preeti G.;			
APPLICANT: RAMKUMAR, Jayalaxmi.; WARREN, Bridget A.;			
APPLICANT: KEARNEY, Liam.; POLICKY, Jennifer L.;			
APPLICANT: THANGAVEILU, Kavitha.; BURFORD, Neil			
TITLE OF INVENTION: HUMAN KINASES			
FILE REFERENCE: PI-0209 USA			
CURRENT APPLICATION NUMBER: US/10/888,798			
CURRENT FILING DATE: 2002-11-01			
PRIOR APPLICATION NUMBER: PCT/US01/27219			
PRIOR FILING DATE: 2001-08-31			
PRIOR APPLICATION NUMBER: US 60/240,542			
PRIOR FILING DATE: 2000-10-13			
PRIOR APPLICATION NUMBER: US 60/238,389			
PRIOR FILING DATE: 2000-10-06			
PRIOR APPLICATION NUMBER: US 60/236,499			
PRIOR FILING DATE: 2000-09-29			
PRIOR APPLICATION NUMBER: US 60/234,902			
PRIOR FILING DATE: 2000-09-22			
PRIOR APPLICATION NUMBER: US 60/232,654			
PRIOR FILING DATE: 2000-09-14			
PRIOR APPLICATION NUMBER: US 60/231,357			
PRIOR FILING DATE: 2000-09-08			
PRIOR APPLICATION NUMBER: US 60/229,873			
PRIOR FILING DATE: 2000-08-31			
NUMBER OF SEQ ID NOS: 48			
SOFTWARE: PERL Program			
SEQ ID NO 42			
LENGTH: 2647			
TYPE: DNA			
ORGANISM: Homo sapiens			
FEATURE:			
NAME/KEY: misc_feature			

OTHER INFORMATION: Incyte ID No. US20030207299A1 4022651CB1  
US-10-288-798-42

Query Match	98.0%	Score 1965	DB 16	Length 2647
Best Local Similarity	100.0%	Pred. No. 0		
Matches 1966	Conservative 0	Mismatches 0	Indels 0	Gaps 0

QY	42	GTATTTGGGACCTTACCGGCTGAGAAAGCGTGGGCAAGGGGCGAGACAGTCTGTGA	101
Db	30	GTAATTTGGGACCTTACCGGCTGAGAAAGCGTGGGCAAGGGGCGAGACAGTCTGTGA	89
QY	102	GCTGGGGGTTCACTCGCTCACTTCCCAAGAGTGGCCATCMAAGTCGTCAACCTTGAGA	161
Db	90	GCTGGGGGTTCACTCGCTCACTTCCCAAGAGTGGCCATCMAAGTCGTCAACCTTGAGA	149
QY	162	GCTGAGCAGTCCGTCGTGATGTAAGAGTGAAGCGGAGATCGGATCCTGAAGCTATTGA	221
Db	150	GCTGAGCAGTCCGTCGTGATGTAAGAGTGAAGCGGAGATCGGATCCTGAAGCTATTGA	209
QY	222	GCACCCCCAGCGTCTTAAAGCTGACAGACGTTTATGAAAACAAAAAATATTTTGTACTGT	281
Db	210	GCACCCCCAGCGTCTTAAAGCTGACAGACGTTTATGAAAACAAAAAATATTTTGTACTGT	269
QY	282	GCTAATAACAGTCGTAGAGTGTGAGACTCTTGACATACCTGTGTGAAGAAAGGGAGCTAC	341
Db	270	GCTAATAACAGTGTAGAGTGTGAGACTCTTGACATACCTGTGTGAAGAAAGGGAGCTAC	329
QY	342	GCTTAAGAGGCTCGAAGTTCCTCCGGCAGATCATCTCTGGCTGAGACTTCTGCCACAG	401
Db	330	GCTTAAGAGGCTCGAAGTTCCTCCGGCAGATCATCTCTGGCTGAGACTTCTGCCACAG	389
QY	402	CCACTTCATATGCCAAGGGATCTGAACCTGAAAACTCTCTGTGACAGAGAACAA	461
Db	390	CCACTTCATATGCCAAGGGATCTGAACCTGAAAACTCTCTGTGACAGAGAACAA	449
QY	462	CATCCGCATCCGACACTTTGGCATGGCGCCTGAGGTGGCGACAGCCTGTGTGAGAC	521
Db	450	CATCCGCATCCGACACTTTGGCATGGCGCCTGTCTGCAAGTTGGCGACAGCCTGTGTGAAC	509
QY	522	CAGCTGTGGTCCCCCACTACGCTGCCCGAGGTGATCCGGGGGAGAAATATGACGG	581
Db	510	CAGCTGTGGTCCCCCACTACGCTGCCCGAGGTGATCCGGGGGAGAAATATGACGG	569
QY	582	CCGGAAGCGGACGTCGTGAGAGCTGGGGGTCACTCTGTTCGGCTTGCTGATGGGGGCT	641
Db	570	CCGGAAGCGGACGTCGTGAGAGCTGGGGGTCACTCTGTTCGGCTTGCTGATGGGGGCT	629
QY	642	GCCCTTCACAGATGACAACTTGSCACAGCTCTGTGAGAAAGTGAACGGGGCGTTCGA	701
Db	630	GCCCTTCACAGATGACAACTTGSCACAGCTCTGTGAGAAAGTGAACGGGGCGTTCGA	689
QY	702	CATGCCGCACTTTATCCGCCCGGACTGCCAGTCTGCTACGGGGCATGATGAGGTGA	761
Db	690	CATGCCGCACTTTATCCGCCCGGACTGCCAGTCTGCTACGGGGCATGATGAGGTGA	749
QY	762	GCGCCGACGCGCCTCACGCTAGACGACATTTAGAAAAACATATGATGTTATAGGGCGCA	821
Db	750	GCGCCGACGCGCCTCACGCTAGACGACATTTAGAAAAACATATGATGTTATAGGGCGCA	809
QY	822	GAATGAGCCGGAACGAGACAGCCCATTCCTGCAAGTGCAGATCCGCTCGTCCGAG	881
Db	810	GAATGAGCCGGAACGAGACAGCCCATTCCTGCAAGTGCAGATCCGCTCGTCCGAG	869
QY	882	CCTGAGAGACATCCGACCCCGAGTCGTGAGACGATGACATCACTAGGGTCGTTCCGGA	941
Db	870	CCTGAGAGACATCCGACCCCGAGTCGTGAGACGATGACATCACTAGGGTCGTTCCGGA	929
QY	942	CCGCAACAAGCTGTGCAAGACCTGTCTCCAGAGAGGAACAAGAGAAATGATTTA	1001
Db	930	CCGCAACAAGCTGTGCAAGACCTGTCTCCAGAGAGGAACAAGAGAAATGATTTA	989
QY	1002	CTTCTCTCTCTGACCGGAAGAAAGTACCCGAGCCGAGAGATGAGAACCTTCCCCC	106

Db	990	CTTCCTCCTCTTGAGACGGAAAGAAAGGTAACCCAGACGAGAGGATGAGACCTGCCCC	104.9
OY	1062	CCGGAGCAGATATACCTCTCCCGGAGACGTGTGACTTCCCGGATGTGAAACGGGACGG	112.21
Db	1050	CCGGAGCAGATATACCTCTCCCGGAGACGTGTGACTTCCCGGATGTGAAACGGGACGG	110.9
OY	1122	CAAGCGGCGGCGCAAAACGCAAAATCATGAGAGTCTCAGCGTGAACGAGCGGCGTCCC	118.1
Db	1110	CAAGCGGCGGCGCAAAACGCAAAATCATGAGAGTCTCAGCGTGAACGAGCGGCGTCCC	116.9
OY	1182	GGTGCTGCGCGGCGGCGCAATGAGATGAGCCAGACAGCGGCGAGAGTCTCGTCCATCAG	124.1
Db	1170	GGTGCTGCGCGGCGGCGCAATGAGATGAGCCAGACAGCGGCGAGAGTCTCGTCCATCAG	122.2
OY	1242	CGGTGCTCTCTCAGAGCTTTTCCACAGCCCATCAGACGCCCCCGGGTGAACCCCTCACCC	130.7
Db	1230	CGGTGCTCTCTCAGAGCTTTTCCACAGCCCATCAGACGCCCCCGGGTGAACCCCTCACCC	128.9
OY	1302	CTCACAAAGGGGAGTCCCTCTCCCAACCCCAAGGGGACACTGTCCACACGCCAAAGGA	136.1
Db	1290	CTCACAAAGGGGAGTCCCTCTCCCAACCCCAAGGGGACACTGTCCACACGCCAAAGGA	134.9
OY	1362	GAGCCCGGCTGGCAGCGCCCAACCCCAAGCGCCCGTCCAGCCCGAGCGTCCGAGGGGTGCC	142.21
Db	1350	GAGCCCGGCTGGCAGCGCCCAACCCCAAGCGCCCGTCCAGCCCGAGCGTCCGAGGGGTGCC	140.9
OY	1422	CTGAGAGGCGCGGCTCAACCTCCATCAGAAACAGGCTTTCTGGGCTCACCCCGCTCCACG	148.9
Db	1410	CTGAGAGGCGCGGCTCAACCTCCATCAGAAACAGGCTTTCTGGGCTCACCCCGCTCCACG	146.9
OY	1482	CCGGAACCTGCAAGATTCCAGCGCGGAGAGATCTCCACTGACACCGAGTGTCTCCC	154.41
Db	1470	CCGGAACCTGCAAGATTCCAGCGCGGAGAGATCTCCACTGACACCGAGTGTCTCCC	152.2
OY	1542	AGAGCTGCGGAAGATCTGTTGGAACTTCATCAGCCTGAGAAAGAGAGCAGAT	160.1
Db	1530	AGAGCTGCGGAAGATCTGTTGGAACTTCATCAGCCTGAGAAAGAGAGCAGAT	158.9
OY	1602	CTTGTGTCTATCAAAAGCAACTCTGAGTTCATCAAGGCTGACATCGTGACGGCTT	166.1
Db	1590	CTTGTGTCTATCAAAAGCAACTCTGAGTTCATCAAGGCTGACATCGTGACGGCTT	164.4
OY	1662	CCTGTGCAATTCCAGTCTCAGCCACAGCGTATCTCCAAACGAGCTTCCGGGCGAGTA	172.21
Db	1650	CCTGTGCAATTCCAGTCTCAGCCACAGCGTATCTCCAAACGAGCTTCCGGGCGAGTA	170.9
OY	1722	CAAGGCGCACGGGGGCGCAGCGGTTCAGAGCCGGTCAAGTTCCAGGTTGATATAC	178.1
Db	1710	CAAGGCGCACGGGGGCGCAGCGGTTCAGAGCCGGTCAAGTTCCAGGTTGATATAC	176.9
OY	1782	CTACACGAGAGGTGGGAGCGCGCAAGAGAAAGGCACTACTCCGTCACCTTCACCT	184.1
Db	1770	CTACACGAGAGGTGGGAGCGCGCAAGAGAAAGGCACTACTCCGTCACCTTCACCT	182.2
OY	1842	GCTCTCAGGCCCGCAGCGCTTCAAGAGGGTGGTGAAGCACTCCAGGCCAGCTGCT	190.1
Db	1830	GCTCTCAGGCCCGCAGCGCTTCAAGAGGGTGGTGAAGCACTCCAGGCCAGCTGCT	188.9
OY	1902	GAGCACACAGACCCGCTCGGCGCCAGCACTTGTCAAGACCACTAACTGTATGGAAT	196.1
Db	1890	GAGCACACAGACCCGCTCGGCGCCAGCACTTGTCAAGACCACTAACTGTATGGAAT	194.9
OY	1962	GATACGCGGGCGGCTTCCAAATGAGAAATATCCGAAAGTTAA 2007	
Db	1950	GATACGCGGGCGGCTTCCAAATGAGAAATATCCGAAAGTTAA 1995	

RESULT 8  
US-10-283-247-1  
; Sequence 1, Application US/10283247  
; Publication No. US20030119037A1  
; GENERAL INFORMATION:  
; APPLICANT: NEELAM, Beena et al.

TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC  
 ; TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES  
 ; FILE REFERENCE: CL001304  
 ; CURRENT APPLICATION NUMBER: US/10/283,247  
 ; CURRENT FILING DATE: 2002-10-30  
 ; NUMBER OF SEQ. ID NOS: 10  
 ; SOFTWARE: PASTSEQ for Windows Version 4.0  
 ; SEQ ID NO: 1  
 ; LENGTH: 2025  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; US-10-283-247-1

Query Match 96.7%; Score 1941.2; DB 15; Length 2025;  
 Best Local Similarity 99.8%; Pred. No. 0;  
 Matches 1943; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

1 ATGACATCGACGGGGAGAGACGGGGGCGCGCAGACGCGCATGTTGGGCGCTTACCGG 60  
 1 ATGACATCGACGGGGAGAGACGGGGGCGCGCAGACGCGCATGTTGGGCGCTTACCGG 60  
 61 CTGAGAGAGAGCGCTGGGCGAAGGGCGACAGCTTGTGTGAAGCTGGGGGTTCACTGGCTC 120  
 61 CTGAGAGAGAGCGCTGGGCGAAGGGCGACAGCTTGTGTGAAGCTGGGGGTTCACTGGCTC 120  
 121 ACCGCGCAGAGAGTGGCCATCAAGATGTCACCGGTAGAGAGCTCAAGAGTGGTGTG 180  
 121 ACCGCGCAGAGAGTGGCCATCAAGATGTCACCGGTAGAGAGCTCAAGAGTGGTGTG 180  
 181 ATGAAGGTGAGCGCGAGATGCGATCTTGAAGCTCAATTAGACACCCCGACGTCCTAAG 240  
 181 ATGAAGGTGAGCGCGAGATGCGATCTTGAAGCTCAATTAGACACCCCGACGTCCTAAG 240  
 241 CTGACGACGCTTATGAAACAAATAATTTGTAAGCTGGTGTGAGACAGCTGTACAGT 300  
 241 CTGACGACGCTTATGAAACAAATAATTTGTAAGCTGGTGTGAGACAGCTGTACAGT 300  
 301 GGTGAGCTCTTGAAGCTTGTGTGAGAGAGAGGCTGACGCTTGAAGAGGCTTGGAG 360  
 301 GGTGAGCTCTTGAAGCTTGTGTGAGAGAGAGGCTGACGCTTGAAGAGGCTTGGAG 360  
 361 TTCTTTCGGGAGATCATCTTGGCGCTGACCTTGGCCACAGCCATCCATATGCGACAG 420  
 361 TTCTTTCGGGAGATCATCTTGGCGCTGACCTTGGCCACAGCCATCCATATGCGACAG 420  
 421 GATCTGAAACCTGAAACCTCTCTGCTGAGAGAGAGAAACAATCCGCAATCGACACTT 480  
 421 GATCTGAAACCTGAAACCTCTCTGCTGAGAGAGAGAAACAATCCGCAATCGACACTT 480  
 481 GGCATGCGCTCTCTGAGAGTGGCGACAGCTTGTGAGAGACAGCTGTGGTCCCCCAG 540  
 481 GGCATGCGCTCTCTGAGAGTGGCGACAGCTTGTGAGAGACAGCTGTGGTCCCCCAG 540  
 541 GGCATGCGCTCTCTGAGAGTGGCGACAGCTTGTGAGAGACAGCTGTGGTCCCCCAG 540  
 541 GGCATGCGCTCTCTGAGAGTGGCGACAGCTTGTGAGAGACAGCTGTGGTCCCCCAG 540  
 541 TACGCTTCCCGGAGGTATCCGGGGGAGAGATATACCGCCGAGAGGGGAGAGTGTG 600  
 541 TACGCTTCCCGGAGGTATCCGGGGGAGAGATATACCGCCGAGAGGGGAGAGTGTG 600  
 601 AGCTGCGGCGTATCTTGTGCTGTGTGCTGTGTGCTGTGTGCTGTGTGCTGTGTGCT 660  
 601 AGCTGCGGCGTATCTTGTGCTGTGTGCTGTGTGCTGTGTGCTGTGTGCTGTGTGCT 660  
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 721 CCCGACCTGCGAGAGTCTCTACGGGGCATGATCGAGGTGAGCGCGCATCCGCTACG 780  
 781 CTAAGAGCATTTGAGAGAGAGATATGAGATATAGGGGCAAGATGAGCCCGAGCAAG 840  
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 841 CAGCCCATTTCTGCGAAGGTGACATCGGCTGCGCGCAGCTGAGAGACATGACCCC 900  
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 901 GACGTGTGAGACAGCATGACTCATGAGGCTGTCTCCGAGCGGCAACAACTGCTGAG 960  
 961 GACGTGTGAGACAGCATGACTCATGAGGCTGTCTCCGAGCGGCAACAACTGCTGAG 1020  
 961 GACGTGTGAGACAGCATGACTCATGAGGCTGTCTCCGAGCGGCAACAACTGCTGAG 1020  
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 1021 AAAGAAAGTACCCGAGCGAGAGATGAGACCTGCTCCCGGAAAGATGACCTT 1080  
 1081 CCGCGGAGAGCTGTGAGCTCCCGGAGTGTGAACCGGAGCGGCAAGCGCGCGGAGAG 1140  
 1081 CCGCGGAGAGCTGTGAGCTCCCGGAGTGTGAACCGGAGCGGCAAGCGCGCGGAGAG 1140  
 1141 AAATCATGAGAGTGTGAGCTGAGCTGAGAGCGAGCGGCTCCCGGAGTGTGAGAG 1200  
 1141 AAATCATGAGAGTGTGAGCTGAGCTGAGAGCGAGCGGCTCCCGGAGTGTGAGAG 1200  
 1201 ATTGAGATGCGCCAGACAGCGGCAAGAGTCTTGTGTGATCAAGCGGTGCTCTCAAG 1260  
 1201 ATTGAGATGCGCCAGACAGCGGCAAGAGTCTTGTGTGATCAAGCGGTGCTCTCAAG 1260  
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 1261 TCACACAGCCCATCAGAGAGCGGCGGAGGCTGAGAGCGGCTTACCGCAAGAGGAG 1320  
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 1441 TCATCAAGAGAGAGCTTCTGAGGCTCAACCGGCTTCAACCGGCGGAAATGCAAGTTC 1500  
 1441 TCATCAAGAGAGAGCTTCTGAGGCTCAACCGGCTTCAACCGGCGGAAATGCAAGTTC 1500  
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 1501 AGCGCGGAGAGAGTGTCAACCTGAGACAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1560  
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 1681 AGCCAGAGGATCTCCCAAGAGAGTTCGGGCGGAGTCAAGAGGCAACGCGGAGGCA 1740  
 1681 AGCCAGAGGATCTCCCAAGAGAGTTCGGGCGGAGTCAAGAGGCAACGCGGAGGCA 1740  
 1741 GCGGTGTTCAGAGAGCGGCTCAAGTTCAGAGTGTATATCACTTCAAGAGAGAGAG 1800  
 1741 GCGGTGTTCAGAGAGCGGCTCAAGTTCAGAGTGTATATCACTTCAAGAGAGAGAG 1800  
 1801 GCGAGAGAGAGAGAGAGAGATCTTCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1860  
 1801 GCGAGAGAGAGAGAGAGAGATCTTCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1860  
 1861 CGCTTCAAGAGAGAGAGAGAGATCTTCAAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1920  
 1861 CGCTTCAAGAGAGAGAGAGAGATCTTCAAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1920

QY 1921 GCGGCCGACGCTTGTGACAGACAC 1946  
DB 1921 GCGGCCGACGCTTGTGACAGACCC 1946

## RESULT 9

US-09-842-582-3  
; Sequence 3, Application US/09842582  
; Patent No. US20020155570A1  
; GENERAL INFORMATION:  
; APPLICANT: Millennium Pharmaceuticals, Inc.  
; APPLICANT: Meyers, Rachel  
; TITLE OF INVENTION: 2246, NOVEL PROTEIN KINASE MOLECULES AND  
; FILE REFERENCE: 38155-20054.00  
; CURRENT APPLICATION NUMBER: US/09/842,582  
; CURRENT FILING DATE: 2001-04-25  
; PRIORITY APPLICATION NUMBER: US 60/199,391  
; PRIORITY FILING DATE: 2000-04-25  
; NUMBER OF SEQ ID NOS: 11  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 3  
; LENGTH: 2025  
; TYPE: DNA  
; ORGANISM: Homo sapiens  
US-09-842-582-3

Query Match 96.6%; Score 1939.6; DB 9; Length 2025;  
Best Local Similarity 99.8%; Pred. No. 0;  
Matches 1942; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 ATGACATGACGCGGAGAGACGCGCGCAGACGCGCATGATGTTGGGCGCTACCGG 60  
DB 1 ATGACATGACGCGGAGAGAGACGCGCGCAGACGCGCATGATGTTGGGCGCTACCGG 60  
QY 61 CTGGAAGAAGCGCTGGGCGAAGGGGAGACAGGCTGTGGTGAAGCTGGGGGTTCACTGCGTC 120  
DB 61 CTGGAAGAAGCGCTGGGCGAAGGGGAGACAGGCTGTGGTGAAGCTGGGGGTTCACTGCGTC 120  
QY 121 ACCCGCAGAGAGTGGCCATCAAGATGTCACCGTGAAGCTCAGCGAGTGGTCTG 180  
DB 121 ACCCGCAGAGAGTGGCCATCAAGATGTCACCGTGAAGCTCAGCGAGTGGTCTG 180  
QY 181 ATGAAGTGAAGCGGAGATCGCGATCTGAAGCTCATTAGACACCCCGCTCTTAAG 240  
DB 181 ATGAAGTGAAGCGGAGATCGCGATCTGAAGCTCATTAGACACCCCGCTCTTAAG 240  
QY 241 CTGACAGACGTTTATGAAAACAAAATATTTGTACTGTGTAGACACGTCAGGT 300  
DB 241 CTGACAGACGTTTATGAAAACAAAATATTTGTACTGTGTAGACACGTCAGGT 300  
QY 301 GGTGAGCTCTTCCACTACCTGTGTGAAGAGAGGGAGCTTACGCTTAAGAGGCTCGAAG 360  
DB 301 GGTGAGCTCTTCCACTACCTGTGTGAAGAGAGGGAGCTTACGCTTAAGAGGCTCGAAG 360  
QY 361 TTCTTCCGAGAGATCATCTGTGCGGTGACTTTCGACAGCCACTTCATATGTCACAG 420  
DB 361 TTCTTCCGAGAGATCATCTGTGCGGTGACTTTCGACAGCCACTTCATATGTCACAG 420  
QY 421 GATCTGAACCTGAAAACCTCTGTGTGAGAGAGAAACAATCCGATCGACACTT 480  
DB 421 GATCTGAACCTGAAAACCTCTGTGTGAGAGAGAAACAATCCGATCGACACTT 480  
QY 481 GGCATGCGCTCCCGCAGGTGGGAGACAGCTGTGAGACAGCTGTGGTCCCGCCAC 540  
DB 481 GGCATGCGCTCCCGCAGGTGGGAGACAGCTGTGAGACAGCTGTGGTCCCGCCAC 540  
QY 541 TACGCTGCGCCGAGGTGATCCGGGGAGAGATGACCGCGAGCGAGCGAGCTGTG 600  
DB 541 TACGCTGCGCCGAGGTGATCCGGGGAGAGATGACCGCGAGCGAGCGAGCTGTG 600  
QY 601 AGCTGCGCGCTCATCTCTGTGTGCTGTGGGGCTGTGCTTCCGACATGACAC 660

DB 601 AGCTGCGCGCTCATCTCTGTGTGCTGTGGGGCTGTGCTTCCGACATGACAC 660  
QY 661 TTGACACAGCTGCTGAGAGAGTGAAGGGGGCGGTTCACACATGCGCACTTATCCG 720  
DB 661 TTGACACAGCTGCTGAGAGAGTGAAGGGGGCGGTTCACACATGCGCACTTATCCG 720  
QY 721 CCCGATCCGAGAGTCTGCTACGGGGCATGATCGAGTGAAGCGCCGACGCGCTCAG 780  
DB 721 CCCGATCCGAGAGTCTGCTACGGGGCATGATCGAGTGAAGCGCGCCGCTCAG 780  
QY 781 CTAGAGCATTCAGAAAACATATGATATATAGGGGGCAAGATGACCCGAAACCAAG 840  
DB 781 CTAGAGCATTCAGAAAACATATGATATATAGGGGGCAAGATGACCCGAAACCAAG 840  
QY 841 CAGCCATTCCTCGAAGGTGACAGTCCGCTCGCTGCGCCAGCTGAGAGACATGACCC 900  
DB 841 CAGCCATTCCTCGAAGGTGACAGTCCGCTCGCTGCGCCAGCTGAGAGACATGACCC 900  
QY 901 GACGTGTGACAGCATGCACTCACTGAGCTGTCTCCAGACCCGACCAAGCTGTGAG 960  
DB 901 GACGTGTGACAGCATGCACTCACTGAGCTGTCTCCAGACCCGACCAAGCTGTGAG 960  
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DB 961 GACCTGTGTGAGAGAGAGACAGAGAGATGATTTACTTCTCTCTCTGAGCCG 1020  
QY 1021 AAGAGAGATACCCGAGCAGAGAGATGAGACCTGCCCCCGGAGACAGATAGACCT 1080  
DB 1021 AAGAGAGATACCCGAGCAGAGAGATGAGACCTGCCCCCGGAGACAGATAGACCT 1080  
QY 1081 CCGCGAGAGCGTGTGATCTCCCGATGCTGAACCGGACAGGACCGCGCGCGAGAGCG 1140  
DB 1081 CCGCGAGAGCGTGTGATCTCCCGATGCTGAACCGGACAGGACCGCGCGCGAGAGCG 1140  
QY 1141 AATCCATGAGAGTCTCAGCGTGAAGAGCGGCTCCCGGTCTGCTGCGCGGCGCC 1200  
DB 1141 AATCCATGAGAGTCTCAGCGTGAAGAGCGGCTCCCGGTCTGCTGCGCGGCGCC 1200  
QY 1201 ATTGAGTGGCCACGACGCGGACAGGTCTGTGATCATACAGGTGCTCTCAGGCTT 1260  
DB 1201 ATTGAGTGGCCACGACGCGGACAGGTCTGTGATCATACAGGTGCTCTCAGGCTT 1260  
QY 1261 TCCACAGCGCATGAGAGCGCCCGGGTGAACCCCTCAACCCCTCAACAGGGGCGAGTCC 1320  
DB 1261 TCCACAGCGCATGAGAGCGCCCGGGTGAACCCCTCAACCCCTCAACAGGGGCGAGTCC 1320  
QY 1321 CTCCACCGCCCAAGGGAGACCTGTGCAACGCGCAAGAGAGAGCGCGCTGGCAGCGCC 1380  
DB 1321 CTCCACCGCCCAAGGGAGACCTGTGCAACGCGCAAGAGAGAGCGCGCTGGCAGCGCC 1380  
QY 1381 AACCCAGCGCCCGCTCCAGCGCGTGGAGGGGCTGCTGAGAGGGCGCGCTCAAC 1440  
DB 1381 AACCCAGCGCCCGCTCCAGCGCGTGGAGGGGCTGCTGAGAGGGCGCGCTCAAC 1440  
QY 1441 TCCATCAAGAACAGCTTCTGCGCTCAACCGCTTCCACCGCGGAAACCTGAAATTCCG 1500  
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DB 1501 AGCGGAGAGAGATGCTCAACCTGACACCAAGTGTCTCCAGAGCTGGCGAAGAGTCC 1560  
QY 1561 TGGTTGGGAACCTTATCAGCTGTGAGAGAGAGAGAGAGATCTTGTGTGATCAAAAG 1620  
DB 1561 TGGTTGGGAACCTTATCAGCTGTGAGAGAGAGAGAGAGATCTTGTGTGATCAAAAG 1620  
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DB 1621 AAACCTTGAAGCTCATCAAGCTGACATCGTGAACAGAGAGAGAGATCTTGTGTG 1680  
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DB 1681 AGCCAGAGGTATCTCCCAAGAGCTTCCGGGCGAGTCAAGAGCCAGCGGGGGGCA 1740



QY 1741 GCCGTGTTCCAGAAAGCCGGTCAAGTTCCAGTTGATATACCTTACCGAGAGGGTGGGAG 1800  
Db 1741 GCCGTGTTCCAGAAAGCCGGTCAAGTTGATATACCTTACCGAGAGGGTGGGAG 1800  
QY 1801 GCGCAGAGAGAGAAAGCGCATCTACTCCGTACCTTCAACCTTCAAGCCCGACCGGT 1860  
Db 1801 GCGCAGAGAGAGAAAGCGCATCTACTCCGTACCTTCAACCTTCAAGCCCGACCGGT 1860  
QY 1861 CGCTTCAAGAGGGGTGGAGACCATCCAGGCCCAAGTGTGAGCAACACGACCGCGCT 1920  
Db 1861 CGCTTCAAGAGGGGTGGAGACCATCCAGGCCCAAGTGTGAGCAACACGACCGCGCT 1920  
QY 1921 GCGGCCAGACCTTGTGACAGACCAC 1946  
Db 1921 GCGGCCAGACCTTGTGACAGACCAC 1946

RESULT 10  
US-09-842-582-1  
Sequence 1, Application US/09842582  
Patent No. US20020155570A1  
GENERAL INFORMATION:  
APPLICANT: Millennium Pharmaceuticals, Inc.  
APPLICANT: Meyers, Rachel  
TITLE OF INVENTION: 2246, NOVEL PROTEIN KINASE MOLECULES AND  
TITLE OF INVENTION: USES THEREFOR  
FILE REFERENCE: 38155-20054.00  
CURRENT APPLICATION NUMBER: US/09/842,582  
PRIORITY FILING DATE: 2001-04-25  
PRIORITY APPLICATION NUMBER: US 60/199,391  
PRIORITY FILING DATE: 2000-04-25  
NUMBER OF SEQ ID NOS: 11  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO: 1  
LENGTH: 2219  
TYPE: DNA  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (53) ... (2077)  
US-09-842-582-1

Query Match 96.6%; Score 1939.6; DB 9; Length 2219;  
Best Local Similarity 99.8%; Pred. No. 0;  
Matches 1942; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 ATGACATCGACGGGAGAGAGAGCGGCGCGCAGCAGCGCAGTATGTTGGCCCTTACCGG 60  
Db 53 ATGACATCGACGGGAGAGAGAGCGGCGCGCAGCAGCGCAGTATGTTGGCCCTTACCGG 112  
QY 61 CTGAGAGAGAGCGTGGGCAAGGGGCAAGCTGTGTAAGCTGGGGGTTCACTGCGTC 120  
Db 113 CTGAGAGAGAGCGTGGGCAAGGGGCAAGCTGTGTAAGCTGGGGGTTCACTGCGTC 172  
QY 121 ACTGCGAGAGAGTGGCCATCAAGANTGTCACCGGTGAGAGCTCAAGCAGTGGTCTG 180  
Db 173 ACTGCGAGAGAGTGGCCATCAAGANTGTCACCGGTGAGAGCTCAAGCAGTGGTCTG 232  
QY 181 ATGAGAGTGAAGCGGAGATGCGATCTCTGAAGCTATTGAGCAACCCCACTCTTAAAG 240  
Db 233 ATGAGAGTGAAGCGGAGATGCGATCTCTGAAGCTATTGAGCAACCCCACTCTTAAAG 292  
QY 241 CTGACAGAGCTTTATGAAAAAATATTTGTACTGTGTGCTAGAACAGTGTGAGGT 300  
Db 293 CTGACAGAGCTTTATGAAAAAATATTTGTACTGTGTGCTAGAACAGTGTGAGGT 352  
QY 301 GGTAGAGCTTTGACTACTGCTGTAAGAGAGGAGGCTGACGCTTAAAGAGGCTCGAAG 360  
Db 353 GGTAGAGCTTTGACTACTGCTGTAAGAGAGGAGGCTGACGCTTAAAGAGGCTCGAAG 412  
QY 361 TTCTTCGGGAGAGATCATCTGCTGGCTGAGCTTCTGACAGACCACTCATATGCAAGG 420

Db 413 TTCTTCGGGAGAGATCATCTGCTGGCTGAGCTTCTGACAGACCACTCATATGCAAGG 472  
QY 421 GATCTGAAGACTTGAAGAACTCTGCTGAGAGAGAGAAACAATCCGATCGAGACTTT 480  
Db 473 GATCTGAAGACTTGAAGAACTCTGCTGAGAGAGAGAAACAATCCGATCGAGACTTT 532  
QY 481 GGCATGAGCGTCCCTGCAAGTGTGAGCAAGCTGTGTAAGACCACTGTGGTCCCCCAG 540  
Db 533 GGCATGAGCGTCCCTGCAAGTGTGAGCAAGCTGTGTAAGACCACTGTGGTCCCCCAG 592  
QY 541 TAAGCTTCCCGGAGGTGATCCGGGAGAGAGATGATGACGCGGAGAGGAGAGAGTGTG 600  
Db 593 TAAGCTTCCCGGAGGTGATCCGGGAGAGAGATGATGACGCGGAGAGGAGAGTGTG 652  
QY 601 AGCTGCGGCGTATCTGTTGCTGCTTGTGGTGGGAGCTCTGCTCTTGAAGATGACAC 660  
Db 653 AGCTGCGGCGTATCTGTTGCTGCTTGTGGTGGGAGCTCTGCTCTTGAAGATGACAC 712  
QY 661 TTGCGAGAGCTGTGAGAGAGTGAAGCGGGGCGGTGTCACATGCGGCACTTTATCCG 720  
Db 713 TTGCGAGAGCTGTGAGAGAGTGAAGCGGGGCGGTGTCACATGCGGCACTTTATCCG 772  
QY 721 CCCGACTGCGAGAGTCTGCTAAGGGGATGATGAGAGTGAACGCGGACGCGCTTACG 780  
Db 773 CCCGACTGCGAGAGTCTGCTAAGGGGATGATGAGAGTGAACGCGGACGCGCTTACG 832  
QY 781 CTAGAGCACTTCAAGAAACATATGTTATGAGGGGCAAGATGAGCCCGAACCGAG 840  
Db 833 CTAGAGCACTTCAAGAAACATATGTTATGAGGGGCAAGATGAGCCCGAACCGAG 892  
QY 841 CAGCCCATTCCTCGCAAGTGCAGATCGCTGCTGCGCCAGCTGAGAGATGACCC 900  
Db 893 CAGCCCATTCCTCGCAAGTGCAGATCGCTGCTGCGCCAGCTGAGAGATGACCC 952  
QY 901 GACGTGCTGAGACAGATGACTCACTGAGGCTGCTTCCGAGACCGCAACAGTCTCTCAG 960  
Db 953 GACGTGCTGAGACAGATGACTCACTGAGGCTGCTTCCGAGACCGCAACAGTCTCTCAG 1012  
QY 961 GACGTGCTGAG 1020  
Db 1013 GACGTGCTGAG 1072  
QY 1021 AAAGAGAGATCCGAGCGCAGAGAGATGAGAGCTGCGCCCGGAAAGAGATGACCTT 1080  
Db 1073 AAAGAGAGATCCGAGCGCAGAGAGATGAGAGCTGCGCCCGGAAAGAGATGACCTT 1132  
QY 1081 CCCGAGAGCGTGTGAGACTCCCGAGTGTGAACCGGACAGCGAGCGGCGCAGAAAGC 1140  
Db 1133 CCCGAGAGCGTGTGAGACTCCCGAGTGTGAACCGGACAGCGAGCGGCGCAGAAAGC 1192  
QY 1141 AAATCATGAGAGTGTCTCAAGCTGACGAGCGGCGCTCCCGAGTGTCTGCGGCGGAG 1200  
Db 1193 AAATCATGAGAGTGTCTCAAGCTGACGAGCGGCGCTCCCGAGTGTCTGCGGCGGAG 1252  
QY 1201 ATTGAGATGCGCCAGACAGCGCAGAGAGTCTGTGTCATCAAGCGGTGCTCTTCAAG 1260  
Db 1253 ATTGAGATGCGCCAGACAGCGCAGAGAGTCTGTGTCATCAAGCGGTGCTCTTCAAG 1312  
QY 1261 TCACACAGCCCACTGAGAGCGCCCGGGTGAACCTTCAACCCCTTCAACAGAGGAGTCCC 1320  
Db 1313 TCACACAGCCCACTGAGAGCGCCCGGGTGAACCTTCAACCCCTTCAACAGAGGAGTCCC 1372  
QY 1321 CTCCCGACCCCAAGGGAGCACTGTGTCAACGCGCAAGAGAGAGCCCGGTGTGCAAGCC 1380  
Db 1373 CTCCCGACCCCAAGGGAGCACTGTGTCAACGCGCAAGAGAGAGCCCGGTGTGCAAGCC 1432  
QY 1381 AACCCCAAGCCCGGTGCAAGCCCGAGCGGTGAGAGGAGTCCCTGAGAGGAGCGGCTCAAC 1440  
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QY 1441 TCCATCAAGAAAGAGTCTTGTGGGTCAACCTGCTTCAACGCGCGGAAATGCAAGTTCCG 1500  
Db 1493 TCCATCAAGAAAGAGTCTTGTGGGTCAACCTGCTTCAACGCGCGGAAATGCAAGTTCCG 1552



QY 1501 ACGCCGAGAGATATGTCACACCTTGAACAGAGTCGTCCTCCAGAGTGGGGAAGATCC 1560  
 Db 1553 ACGCCGAGAGATATGTCACACCTTGAACAGAGTCGTCCTCCAGAGTGGGGAAGATCC 1612  
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 QY 1621 AAACCTTGAAGCTTCATCAAGAGCTGACATCTGACGCTTCTGTCTATCAAAAG 1680  
 Db 1673 AAACCTTGAAGCTTCATCAAGAGCTGACATCTGACGCTTCTGTCTATCAAAAG 1732  
 QY 1681 AGCCACAGAGCTTCATCAAGAGCTGACATCTGACGCTTCTGTCTATCAAAAG 1740  
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 QY 1741 GCGGTGTTCCAGAAAGCGGTCAAGTTCAAGTTGATATCACTACAGAGAGGTGGAG 1800  
 Db 1793 GCGGTGTTCCAGAAAGCGGTCAAGTTCAAGTTGATATCACTACAGAGAGGTGGAG 1852  
 QY 1801 GCGGAG 1860  
 Db 1853 GCGGAG 1912  
 QY 1861 GCGTTCAAG 1920  
 Db 1913 GCGTTCAAG 1972  
 QY 1921 GCGGCGGAG 1946  
 Db 1973 GCGGCGGAG 1998

RESULT 11  
 US-10-054-579-3  
 ; Sequence 3, Application US/10054579  
 ; Publication No. US20020137913A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Turner, C. Alexander Jr.  
 ; APPLICANT: Mathur, Brian  
 ; TITLE OF INVENTION: No. US20020137913A1 Human Kinases and Polynucleotides Encoding  
 ; FILE REFERENCE: LEX-0300-USA  
 ; CURRENT APPLICATION NUMBER: US/10/054,579  
 ; PRIOR FILING DATE: 2002-01-22  
 ; PRIOR APPLICATION NUMBER: US 60/263,378  
 ; NUMBER OF SEQ ID NOS: 4  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 3  
 ; LENGTH: 1827  
 ; TYPE: DNA  
 ; ORGANISM: homo sapiens  
 US-10-054-579-3

Query Match 51.0%; Score 1827; DB 14; Length 1827;  
 Best Local Similarity 100.0%; Pctd. No. 0;  
 Matches 1827; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 181 ATGAAGTGAAG 240  
 Db 1 ATGAAGTGAAG 60  
 QY 241 CTGACAGAGCTTTATGAAAAAATAATTTTGAAGCTGTGTGCTGTAAGACGTGTCAAGT 300  
 Db 61 CTGACAGAGCTTTATGAAAAAATAATTTTGAAGCTGTGTGCTGTAAGACGTGTCAAGT 120  
 QY 301 GGTAGAGCTTCTGAGTACTGTGTGTAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 360  
 Db 121 GGTAGAGCTTCTGAGTACTGTGTGTAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 180  
 QY 361 TTCTTCGGGAGATCATCTCTGCGCTGAGCTTCTGCAAGCCATCTCATATGCGACAGG 420

Db 181 TTCTTCGGGAGATCATCTCTGCGCTGAGCTTCTGCAAGCCATCTCATATGCGACAGG 240  
 QY 421 GATCTGAAGAGCTTGAAG 480  
 Db 241 GATCTGAAGAGCTTGAAG 300  
 QY 481 GGTAGAGCTTCTGAGTACTGTGTGTAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 540  
 Db 301 GGTAGAGCTTCTGAGTACTGTGTGTAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 360  
 QY 541 TACGCTGCGGAG 600  
 Db 361 TACGCTGCGGAG 420  
 QY 601 AGCTGCGGAG 660  
 Db 421 AGCTGCGGAG 480  
 QY 661 TTGCGACAGCTCTGAG 720  
 Db 481 TTGCGACAGCTCTGAG 540  
 QY 721 CCCGAGCTGAG 780  
 Db 541 CCCGAGCTGAG 600  
 QY 781 CTAGAGACATTCAGAAACATATGATATAGAGAGAGAGAGAGAGAGAGAGAGAGAG 840  
 Db 601 CTAGAGACATTCAGAAACATATGATATAGAGAGAGAGAGAGAGAGAGAGAGAGAG 660  
 QY 841 CAGCCCATCTCTGAG 900  
 Db 661 CAGCCCATCTCTGAG 720  
 QY 901 GAGCTGCTGAG 960  
 Db 721 GAGCTGCTGAG 780  
 QY 961 GAGCTGCTGAG 1020  
 Db 781 GAGCTGCTGAG 840  
 QY 1021 AAG 1080  
 Db 841 AAG 900  
 QY 1081 CCCCGAG 1140  
 Db 901 CCCCGAG 960  
 QY 1141 AATTCATGAG 1200  
 Db 961 AATTCATGAG 1020  
 QY 1201 ATTGAGATGAG 1260  
 Db 1021 ATTGAGATGAG 1080  
 QY 1261 TCCACAG 1320  
 Db 1081 TCCACAG 1140  
 QY 1321 CTCGCCAG 1380  
 Db 1141 CTCGCCAG 1200  
 QY 1381 AACCCAG 1440  
 Db 1201 AACCCAG 1260  
 QY 1441 TCCATTAAG 1500  
 Db 1261 TCCATTAAG 1320

QY 1501 ACGCCGAGAGATGATCCAACTTGACACAGAGTGTGCTCCAGAGCTGCGGAGAGATCC 1560  
 DB 1321 ACGCCGAGAGATGATCCAACTTGACACAGAGTGTGCTCCAGAGCTGCGGAGAGATCC 1380  
 QY 1561 TGGTTTGGGAACTTCATCAGCTTGAGAGAGAGAGAGATCTTCTGTGTCATCAAGAC 1620  
 DB 1381 TGGTTTGGGAACTTCATCAGCTTGAGAGAGAGAGAGATCTTCTGTGTCATCAAGAC 1440  
 QY 1621 AAACCTGTAGCTTCATCAAGAGCTGAGATGATGAGAGCTTCTGTGTCATCAAGCTC 1680  
 DB 1441 AAACCTGTAGCTTCATCAAGAGCTGAGATGATGAGAGCTTCTGTGTCATCAAGCTC 1500  
 QY 1681 AGCCACAGCTCATCTCCCAACAGAGCTTCCGAGCCGAGTACAAAGCCACAGGAGGAGCC 1740  
 DB 1501 AGCCACAGCTCATCTCCCAACAGAGCTTCCGAGCCGAGTACAAAGCCACAGGAGGAGCC 1560  
 QY 1741 GCCGTGTCCAGAGAGCCGCTCAAGTTCAGAGTTGATTCACCTACACAGAGGAGGAGGAG 1800  
 DB 1561 GCCGTGTCCAGAGAGCCGCTCAAGTTCAGAGTTGATTCACCTACACAGAGGAGGAGGAG 1620  
 QY 1801 GCGCAGAGAGAGAGAGAGCTCACTCCGTCACCTTCACTCCGCTCAGGAGGAGGAGGAG 1860  
 DB 1621 GCGCAGAGAGAGAGAGAGCTCACTCCGTCACCTTCACTCCGCTCAGGAGGAGGAGGAG 1680  
 QY 1861 CGCTTCAAGAGGAGTGTGAGAGACATCAAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1920  
 DB 1681 CGCTTCAAGAGGAGTGTGAGAGACATCAAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1740  
 QY 1921 GCGGAGGAGAGAGCTTGTGACAGACCACTCACTGTATGAGAAATGATGAGAGGAGGAGGAG 1980  
 DB 1741 GCGGAGGAGAGAGCTTGTGACAGACCACTCACTGTATGAGAAATGATGAGAGGAGGAGGAG 1800  
 QY 1981 AATGTGGAATTTATCCGAAAGTTAA 2007  
 DB 1801 AATGTGGAATTTATCCGAAAGTTAA 1827

RESULT 12  
 US-10-425-114-26842  
 ; Sequence 26842, Application US/10425114  
 ; Publication No. US20040034888A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Liu, Jingdong  
 ; APPLICANT: Zhou, Yihua  
 ; APPLICANT: Kovalic, David K.  
 ; APPLICANT: Screen, Steven E  
 ; APPLICANT: Tabaska, Jack B  
 ; APPLICANT: Cao, Yongwei  
 ; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With  
 ; FILE REFERENCE: 38-21(5313)B  
 ; CURRENT APPLICATION NUMBER: US/10/425, 114  
 ; NUMBER OF SEQ ID NOS: 2003-04-28  
 ; SEQ ID NO 26842  
 ; LENGTH: 3791  
 ; TYPE: DNA  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; OTHER INFORMATION: Clone ID: LIB4651-024-E4\_FLI  
 US-10-425-114-26842

Query Match 88.6%; Score 1777.4; DB 13; Length 3791;  
 Best Local Similarity 96.3%; Pred. No. 0;  
 Matches 1857; Conservative 0; Mismatches 6; Indels 66; Gaps 1;  
 QY 84 GCAGACAGCTGTGAGAGCTGAGGAGTTCATCTGCTCACTTCCAGAGAGTGGGATCAAA 143  
 DB 62 GCGTGCAGAGCTGTGAGAGCTGAGGAGTTCATCTGCTCACTTCCAGAGAGTGGGATCAAA 121  
 QY 144 GATGTCAACCGTGAAGAGCTCAGGAGTGTGCTGATGAGAGGAGGAGGAGATCGC 203

DB 122 GATGTCAACCGTGAAGAGCTCAGGAGTGTGCTGATGAGAGTGGAGGAGATCGC 181  
 QY 204 GATCTGAAGCTCAATTGAGACACCCCACTGCTCAAGCTGACAGATTTATGAAAA 263  
 DB 182 GATCTGAAGCTCAATTGAGACACCCCACTGCTCAAGCTGACAGATTTATGAAAA 241  
 QY 264 AAAATATTGTAACCTGAGTGTGTAAGACAGTGTCAAGTGTGAGAGTCTTCCAGCTCAGT 323  
 DB 242 AAAATATTGTAACCTGAGTGTGTAAGACAGTGTCAAGTGTGAGAGTCTTCCAGCTCAGT 301  
 QY 324 GAAGAGAGGAGGAGTGAAGCTCAAGAGAGTGTGAGAGTCTTCCAGAGATCATCTGTGC 383  
 DB 302 GAAGAGAGGAGGAGTGAAGCTCAAGAGAGTGTGAGAGTCTTCCAGAGATCATCTGTGC 361  
 QY 384 GCTGACTTCTTGCAACAGCTCACTCATATGCAACAGGATTTGAAACCTGAAAACTCTCT 443  
 DB 362 GCTGACTTCTTGCAACAGCTCACTCATATGCAACAGGATTTGAAACCTGAAAACTCTCT 421  
 QY 444 GCTGAGAGAGAGAACATCCGATGAGAGCTTGGACATGGAGCTTCCAGAGTGG 503  
 DB 422 GCTGAGAGAGAGAACATCCGATGAGAGCTTGGACATGGAGCTTCCAGAGTGG 481  
 QY 504 CGACAGCTGTGAGAGACAGCTGTGAGTCCCTCCCACTACGCTCTGCCCCAGAGTGAATCCG 563  
 DB 482 CGACAGCTGTGAGAGACAGCTGTGAGTCCCTCCCACTACGCTCTGCCCCAGAGTGAATCCG 541  
 QY 564 GGGGAGAGAGATGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 623  
 DB 542 GGGGAGAGAGATGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 601  
 QY 624 CTGTGAGTGGAGGAGCTGTGCTTCCAGATGACAACTTGGAGAGCTGTGAGAGAGT 683  
 DB 602 CTGTGAGTGGAGGAGCTGTGCTTCCAGATGACAACTTGGAGAGCTGTGAGAGAGT 661  
 QY 684 GAAGGAGGAGGAGTGTGCAATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 743  
 DB 662 GAAGGAGGAGGAGTGTGCAATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 721  
 QY 744 GGGCATGATGAGAGTGTGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 803  
 DB 722 GGGCATGATGAGAGTGTGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 781  
 QY 804 ATGTATATATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 863  
 DB 782 ATGTATATATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 841  
 QY 864 GATCCGCTGTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 923  
 DB 842 GATCCGCTGTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 901  
 QY 924 ACTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 983  
 DB 902 ACTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 961  
 QY 984 CCAGAGAGAGATGATTTACTTCTCTCTGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1043  
 DB 962 CCAGAGAGAGATGATTTACTTCTCTCTGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1021  
 QY 1044 GAGTGAAGAGCTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1103  
 DB 1022 GAGTGAAGAGCTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1081  
 QY 1104 GATGCTGAACCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1163  
 DB 1082 GATGCTGAACCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1141  
 QY 1164 GAG 1223  
 DB 1142 GAG 1201  
 QY 1224 G----- 1224  
 DB 1202 GAGTAAAGCATGTTCACTAAAGCTGATATGCTGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1261

QY	1225	-----AGGCTGAGTCATCAACGGTGCCTCTTCAAGGCTTTCCACAGCCCACTCAG	1277
Db	1262	AGAAAGACAGGCTCTGGTTCATCAGCGGTGCTCTTCAAGGCTTTCCACAGCCCACTCAG	1321
QY	1278	CAGCCCCCGGTGAACCCCTCAACCCCTCAACCAAGGAGAGTCCCTCTCCCAACCCCAAGG	1337
Db	1322	CAGCTCCCGGTGACCCCTCAACCCCTCAACCAAGGAGAGTCCCTCTCCCAACCCCAAGG	1381
QY	1338	GACACCTGTCCAACGCGCAAAAGAGAGCCCGGCTGGACAGGCCAACCCCAAGCCCCCTGC	1397
Db	1382	GACACCTGTCCAACGCGCAAAAGAGAGCCCGGCTGGACAGGCCAACCCCAAGCCCCCTGC	1441
QY	1398	CAGCCCCGAGTGGAGAGGGGTGGCTGGAGGGGCGCGGCTCAACTCATCAAGAAACAATT	1457
Db	1442	CAGCCCCGAGTGGAGAGGGGTGGCTGGAGGGGCGCGGCTCAACTCATCAAGAAACAATT	1501
QY	1458	TCTGGGCTCAACCCCGCTTCCAACGCGCGGAAACCTGCAAGTTCCGACGCGCGAGAGATGTC	1517
Db	1502	TCTGGGCTCAACCCCGCTTCCAACGCGCGGAAACCTGCAAGTTCCGACGCGCGAGAGATGTC	1561
QY	1518	CAACCTGACACCAAGATGCTCCCAAGACTGGCCAAAGATCTGTGGTTTGGGAATTTCAT	1577
Db	1562	CAACCTGACACCAAGATGCTCCCAAGACTGGCCAAAGATCTGTGGTTTGGGAATTTCAT	1621
QY	1578	CAGCTGGAGAGAGAGAGAGAGATCTTCTGTGTCATCAAGAACAAACCTCTGAGCTTCAT	1637
Db	1622	CAGCTGGAGAGAGAGAGAGAGATCTTCTGTGTCATCAAGAACAAACCTCTGAGCTTCAT	1681
QY	1638	CAAGGCTACATCTGTCAAGCGCTTCTGTGCAATTTCCAGTCTCAGCCACAGGCTCATCTC	1697
Db	1682	CAAGGCTACATCTGTGTCAAGCGCTTCTGTGCAATTTCCAGTCTCAGCCACAGGCTCATCTC	1741
QY	1698	CCAAACGAGCTTCCGCGCCGAGTACAGAGCCACCGCGGGGCGCAACCGTGTTCAGAAAGCC	1757
Db	1742	CCAAACGAGCTTCCGCGCCGAGTACAGAGCCACCGCGGGGCGCAACCGTGTTCAGAAAGCC	1801
QY	1758	GGTCAAGTTCAGAGTTGATCATCACTACAGCGAGGGTGGAGAGCGCGAGAAAGAAACGG	1817
Db	1802	GGTCAAGTTCAGAGTTGATCATCACTACAGCGAGGGTGGAGAGCGCGAGAAAGAAACGG	1861
QY	1818	CATCTACTCCGTCACTTCACCGTGTCTCTAGGCGCCCAAGCGCTGCTTCAAGAGGGTGT	1877
Db	1862	CATCTACTCCGTCACTTCACCGTGTCTCTAGGCGCCCAAGCGCTGCTTCAAGAGGGTGT	1921
QY	1878	GGAGACCATCCAGGCGCCAGCTGTGTAGACACACGACCCGCTGTGGGCGCCAGCACTTGT	1937
Db	1922	GGAGACCATCCAGGCGCCAGCTGTGTAGACACACGACCCGCTGTGGGCGCCAGCACTTGT	1981
QY	1938	AGACACCAAC	1946
Db	1982	AGAACTCCC	1990

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RESULT 13
US-10-283-247-4
; Sequence 4, Application US/10283247
; Publication No. US20030119037A1
; GENERAL INFORMATION:
; APPLICANT: NIELAM, Beena et al.
; TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
; TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
; TITLE OF INVENTION: THERCOP
; FILE REFERENCE: C1001104
; CURRENT APPLICATION NUMBER: US/10/283,247
; CURRENT FILING DATE: 2002-10-30
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 1911
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-283-247-4

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Query Match	84.0%;	Score 1685.2;	DB 15;	Length 1911;
Best Local Similarity	96.2%;	Pred. No. 0;		
Matches 1763;	Conservative	0;	Mismatches 3;	Indels 66;
				Gaps 1;

[illegible]



QY 449 ACCGAGAGAACAAATCCGATCGAGACTTTGGCATGGGGTCCCTGACGGTTGGGACA 508  
 DB 494 ATGAGAAAAACAATCCGATTCGAGACTTCGGCAATGGGCTCCCTGACGGTTGGGACA 553  
 QY 509 GCCTGTGGAGACAGCTGTGGGTCCCCCACTACGCTCCCGAGAGTGTATCCGGGGG 568  
 DB 554 GCCTGTGGAGACAGCTGTGGGTCCCCCACTATGCTGTGTCCAGAGTGTATTAAGGGG 613  
 QY 569 AGAAGTATGACGGCCGGGAAAGCGGAGCTGTGGAGCTGGCGCTCATCTCTTGGCTTGG 628  
 DB 614 AAAAATATGATGACGGCCGGGAGAGATGTGGAGCTGTGGAGTGTATCTCTTGGCTTGG 673  
 QY 629 TGGTGGGGGCTCTGCTCCCTTGCAGATGACAACTTGGGACAGCTGTGGAGAGGTGAAG 688  
 DB 674 TCGTGGGGGCTCTGCTCCCTTGCAGATGACAACTTCGGGACAGCTGTGGAGAGGTGAAG 733  
 QY 689 GGGGCGGTGTCCACATGCGGACTTTATCCCGCCGACTGCGGAGTGTGTAGGGGCA 748  
 DB 734 GGGGCGGTGTCCACATGCGGACTTTCAATCTCCAGATTGCGGAGGCTCTCTGAGGGGAA 793  
 QY 749 TGATCGAGTGTGACGCGCGCAAGCGGCTCAAGCTAGAGCACTTCAGAAACATATGTGT 808  
 DB 794 TGATCGAGTGTGACGCGCGCAAAAGGCTCAAGCTGTGAGCAATTCAGAAACATCTTGTGT 853  
 QY 809 ATATAGGGGGCAAGATGAGCCCGAACCC-----AGAGAGCCCATTTCTGCAAGGTGC 862  
 DB 854 ACCTAGGCGGGAAACAAGAGCCAGACCCGTGCTGAGCGAGCCCTGCGCGCGGGTGTAG 913  
 QY 863 AGATCCGCTGCTGCGGCGGAGCTGTGAGACATGCAACCGGCGGCTGTGAGAGATGACAT 922  
 DB 914 CCATGCGGAGCGCTGCACTCAAGAGAGCTGTGAGCCCGAGCTCTTGAAGAGATGAGCAT 973  
 QY 923 CACTGCGCTGCTTCCAGAGCGGCAACAGCTGTGTGAGAGCACTGTGTCTGAGAGAGAG 982  
 DB 974 CACTGCGCTGCTTCCAGAGCGGCAACAGAGAGCTGTGATGCGGAGCTGCGGAGTGAAGAG 1033  
 QY 983 ACCAGAGAGAGATGATTTACTTCTCTCTCTGTGAGCGGAAAGAAAGTATCCGAGCAAG 1042  
 DB 1034 ACCAGAGAGAGATGATTTACTTCTCTTGTGAGTGGAGAGAGCGGTATCCCAAGTGTGT 1093  
 QY 1043 AGATGAGAGAGCTGCGGCGGAGAGAGATGAGACCTCCCGGAAAGCGTGTGAGCTGCC 1102  
 DB 1094 AGAGCCAGAGAGCTGCGGCGGAGAGATGATGTGACCCCGGAAAGCGTGTGAGATTTCT 1153  
 QY 1103 CGATGCTGAACCGGCAAGCGGCAAGCGGCGCAAGCAATTCATGAGGTCTCAAGCG 1162  
 DB 1154 CCATGCTGAGCCGTCACGGGAAAGCGGAGACAGAGCGGAAAGTCCATGTGAAGTCTTGA 1213  
 QY 1163 TGAC-----GGAAGGCGGCGCTCCCGGAGCTGTGCGGCGGAGCCATTTGAGATGGCC 1213  
 DB 1214 TCACCGATGCGCGGAGGTGTGTGCTCCCTGTATCCACCCGAGCGGCTTTGAGATGGCC 1273  
 QY 1214 AGCAGCGGCAAGAGTCTCGGTCAATCAAGCGGTGCTCTTCCAGCCATTCACAGCCCA 1273  
 DB 1274 AGCAGCGGCAAGAGTCTCGGTCAAGTCAAGCGGTGCTCTTCCAGCCATTCACAGCCCA 1333  
 QY 1274 TCAGCAGCGGCGGCT----- 1289  
 DB 1334 TAAAGCAGCGGCAAGAGTCTCGGTCTTTCTTTTCCACCGAGCGGCGGCTGTGAGATGAG 1393  
 QY 1290 ----- 1289  
 DB 1394 CTGAGAGCGGCGGCTCCCGCACTTCAAAAGCGAGAGCGTGTCTTCCGAGGCGCCAGAG 1453  
 QY 1290 -----GACCCCTCAACCTTCAACCAAGGAGAGTCCCTTCCCT----- 1326  
 DB 1454 GTGAGGCGCGCGGAGAGAGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCG 1513  
 QY 1327 -----ACCCCAAGGAGAGAGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCG 1357  
 DB 1514 CCCCAGGCTCCCGGCGGCTCTCTGTGAGGAGAGCGGCGGCGGCGGCGGCGGCGGCGGCG 1573  
 QY 1358 AGGAGAGCGGCGGCTGTGAGAGCGGCAAGCCAGCGGCGGCGGCGGCGGCGGCGGCGGCG 1411

DB 1574 GGGGAGTCCACCGGAGAGCGGCGGAGCAACACACCGGCGGCGGCGGCGGCGGCGGCGG 1633  
 QY 1412 GAGGAGTCCCTGTGAGAGGCGGCGGCTCAACTCCATTCAGAAACAGTTTCTGGGCTCACCCC 1471  
 DB 1634 GGGGAGCGGCTGTGAGAGGAGTGTCTCAACTCCATTCAGAAACAGTTTCTGGGCTCACCCC 1693  
 QY 1472 GCTTCCACCGGCGGAACTGTCAAGTTCGAGCGGCGGAGAGATGTCCAACTGACACGAG 1531  
 DB 1694 GCTTCCACCGGCGGAGATGTCAAGTTCGAGCGGCGGAGAGATGTCCAACTGACACGAG 1753  
 QY 1532 AGTCTCCCGAGAGCTGCGGAGAGAGTCTGTGGTGTGGAACTTCATGAGCTGTGAGAAAG 1591  
 DB 1754 AGTCTCCCGAGAGCTGCGGAGAGAGTCTGTGGTGTGGAACTTCATGAGCTGTGAGAAAG 1813  
 QY 1592 AGGAGCAGATCTGT 1651  
 DB 1814 AAGACAAATATTTCTCTGT 1873  
 QY 1652 TGACGCGCTTCTGT 1711  
 DB 1874 TCCATGCGCTTCTGT 1933  
 QY 1712 GGGGCGGAGTCAAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 1771  
 DB 1934 GGGGCGGAGTCAAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 1993  
 QY 1772 TTGATATCACTTCAAGGAGGCT-----GGGAGGCGGAGAGAGAG 1813  
 DB 1994 TGACATGAGTCTCTGT 2053  
 QY 1814 ACGGATCTTACTGCTTCACTTCACTTCACTTCACTTCACTTCACTTCACTTCACTTCACT 1873  
 DB 2054 GTGATCTTACTGCTTCACTTCACTTCACTTCACTTCACTTCACTTCACTTCACTTCACT 2113  
 QY 1874 TGGTGAAGAGCATTCAGGAGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 1933  
 DB 2114 TGGTGAAGAGCATTCAGGAGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 2173  
 QY 1934 TGTCAAGACCACTTACTG 1952  
 DB 2174 TGGCAGAGAGAGAGAGCGG 2192

RESULT 15  
 US-10-116-326-1  
 ; Sequence 1, Application US/10116326  
 ; Publication No. US2003016689A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Turner, C. Alexander Jr.  
 ; APPLICANT: Mathur, Brian  
 ; APPLICANT: Fiddle, Carl Johan  
 ; TITLE OF INVENTION: No. US2003016689A1 Human Kinases and Polynucleotides Encoding  
 ; FILE REFERENCE: LEX-0332-USA  
 ; CURRENT APPLICATION NUMBER: US/10/116,326  
 ; PRIOR FILING DATE: 2002-04-04  
 ; PRIOR APPLICATION NUMBER: US 60/282,036  
 ; NUMBER OF SEQ ID NOS: 6  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 1  
 ; LENGTH: 2337  
 ; TYPE: DNA  
 ; ORGANISM: homo sapiens  
 US-10-116-326-1

Query Match 48.1%; Score 965; DB 15; Length 2337;  
 Best Local Similarity 70.0%; Pred. No. 4,7e-258;  
 Matches 1484; Conservative 0; Mismatches 440; Indels 195; Gaps 6;

QY 29 GCGAGAGCGGAGATGT 88  
 DB 74 CCGAGAGCGGCAATATGT 133

QY 89 CAGGTCTGTGAAGCTGGGGGTTTCACTGCGTCACTGCGCAGAGGTGGCCATCAAGATCG 148  
 Db 134 CAGGGCTGTGTTAACTGGGGTCCACTGCACTACAGGGGTCAAGAGGTGGCCATCAAGATCG 193  
 QY 149 TCAACCTGTGAAGAGCTCAGCAGTGGTGTCTGAAGAAGTGAACGGAGATCGCATCC 208  
 Db 194 TGAACCGGAGAGAGCTCTCGAGTGGTGTCTGAAGAAGTGAACGGAGATCGCATCC 253  
 QY 209 TGAAGCTCATTTGAGCACCCTCCCTTAAGTGTGACCGACCTTTTGAAGAAATAAT 268  
 Db 254 TGAAGCTCATTTGAGCACCCTCCCTTAAGTGTGACCGACCTTTTGAAGAAATAAT 313  
 QY 269 ATTGTACTGTGTCTGAAGAACAGTGTCAAGTGTGAGTGTCTTGAATCTGTGTAAGA 328  
 Db 314 ATTGTACTGTGTCTGTGAGACAGTGTCTGAGGGGGTGAAGTGTGATCTGACTGTGAAGA 373  
 QY 329 AGGGAGAGCTGACCGCTTAAGAGAGCTTGAAGTGTCTTCCGAGATCATCTGCGCTGG 388  
 Db 374 AGGGAGAGCTGACCGCTTAAGAGAGCTTGAAGTGTCTTCCGAGATCATCTGCGCTGG 433  
 QY 389 ACTTCTGCAAGCCACTTCCATATGCGACAGGGATCTGAACCTGAAGAACTCTGCTGG 448  
 Db 434 ACTTCTGCAAGCCACTTCCATATGCGACAGGGATCTGAACCTGAAGAACTCTGCTGG 493  
 QY 449 ACGAGAGAACCAACATCTGCGATCGCAGACTTTGCGATGCGCTCTGCGAGTTGGCA 508  
 Db 494 ATGAGAGAAACCAACATCTGCGATCGCAGACTTTGCGATGCGCTCTGCGAGTTGGCA 553  
 QY 509 GCGCTGTGAGAGACCGAGTGTGGGTCCCGCACTACGCTGCGCGAGAGTATCGGGGG 568  
 Db 554 GCGCTGTGAGAGACCGAGTGTGGGTCCCGCACTACGCTGCGCGAGAGTATCGGGGG 613  
 QY 569 AGAAGTATGACGGCGGAGAGCGAGCGTGTGAGAGTGGCGCTCATCTGCTGGCTGGC 628  
 Db 614 AGAAGTATGACGGCGGAGAGCGAGCGTGTGAGAGTGGCGCTCATCTGCTGGCTGGC 673  
 QY 629 TGGTGGGGGCTTGGCCCTTGAAGATGACAATTGGGACAGCGCTGGAGAGAGTGAAGC 688  
 Db 674 TGGTGGGGGCTTGGCCCTTGAAGATGACAATTGGGACAGCGCTGGAGAGAGTGAAGC 733  
 QY 689 GGGGCGGTTCACATGCGCGCACTTTATCCGCGCGAGCTGGCAGAGTCTGCTAAGGGGCA 748  
 Db 734 GGGGCGGTTCACATGCGCGCACTTTATCCGCGCGAGCTGGCAGAGTCTGCTAAGGGGCA 793  
 QY 749 TGAATGAGTGAAGCGCGCAAGCGCTTCAAGTGAAGCATTCAAGAAACATATGGT 808  
 Db 794 TGAATGAGTGAAGCGCGCAAGCGCTTCAAGTGAAGCATTCAAGAAACATATGGT 853  
 QY 809 ATATAGGGGGCAAGATGAGCGCGAACCC-----AGAGCAGCCCATTTCTCGAAGGTGC 862  
 Db 854 ATATAGGGGGCAAGATGAGCGCGAACCC-----AGAGCAGCCCATTTCTCGAAGGTGC 913  
 QY 863 AGATCGCTGCTGCCAGCGCTTGAAGACATCGACCTCGACGCTGTGAGACAGTGCAT 922  
 Db 914 AGATCGCTGCTGCCAGCGCTTGAAGACATCGACCTCGACGCTGTGAGACAGTGCAT 973  
 QY 923 CACTGGGCTGCTTCCGAGACCGCAACAAGTGTGAGAGTGTGCTGCTGCGAGAGAGAG 982  
 Db 974 CACTGGGCTGCTTCCGAGACCGCAACAAGTGTGAGAGTGTGCTGCTGCGAGAGAGAG 1033  
 QY 983 ACCGAGAGAGATGATTTACTTCTCTCTCTGACCGGAAAGAAAGTACCGAGCCAGG 1042  
 Db 1034 ACCGAGAGAGATGATTTACTTCTCTCTCTGACCGGAAAGAAAGTACCGAGCCAGG 1093  
 QY 1043 AGGATGAGAGCTTGGCCCCCGGAGACAGATAGACCTTCCCGGAGAGCTGTGATCTCC 1102  
 Db 1094 AGGATGAGAGCTTGGCCCCCGGAGACAGATAGACCTTCCCGGAGAGCTGTGATCTCC 1153  
 QY 1103 CGATGCTGAACCGGACCGGACAGCGGCGGACAGACCAATCCATGAGAGTCTGAGCG 1162  
 Db 1154 CGATGCTGAACCGGACCGGACAGCGGCGGACAGACCAATCCATGAGAGTCTGAGCG 1213

QY 1163 TGAC-----GACCGCGGCTTCCCGAGTCCGTGCGCGCGGGCCATTGAGATGGCCC 1213  
 Db 1214 TGACCGATGCGCGGCGGTGGTGGCTTCCCTGTGACCCAGCGGCGCTTGGAGATGGCCC 1273  
 QY 1214 AGCAGGCGCAAGGCTTCGTGCTCATGACGGTGGCTCTTCAAGGCTTTCCACGAGCCAC 1273  
 Db 1274 AGCAGGCGCAAGGCTTCGTGCTCATGACGGTGGCTCTTCAAGGCTTTCCACGAGCCAC 1333  
 QY 1274 TCAGAGCCCGCGGT-----ACCCCAAGGGGACACTGTCTCAACGCGCA 1289  
 Db 1334 TGAAGCGCCCAAGAGATCGGCTCTTCTTTTCAACCGAGCGGCGGCTGAGATGAGG 1393  
 QY 1290 ----- 1289  
 Db 1394 CTCGAGCGGCGGCTTCCCGACTTCCAAACGACAGCGTGTCTTCTGCGGCGCCAGG 1453  
 QY 1290 -----GACCCCTGACCCCTGACCAAGAGGCGAGTCCCTCC----- 1326  
 Db 1454 GTGGGGGGCGGGAGAGAGCCCGCCCGCCAGATGGCCGCTCAACACCCCTGCGCGGCC 1513  
 QY 1327 -----ACCCCAAGGGGACACTGTCTCAACGCGCA 1357  
 Db 1514 CCGCAGGCTCCCGCGCTCTCTGTGCGGAGACCCCTTGAACCTGCTGTGACAGCGCCC 1573  
 QY 1358 AGGAGAGCGCGGCTGGACAGCGCCCAACCGCCGCGTCCAGCGCC-----AGCGTCG 1411  
 Db 1574 GGGCGAGTCCACCGGAGCCTCGGAGACACACACCCCGAGCCCGGCGGCGCTCG 1633  
 QY 1412 GAGGAGTGCCTTGAAGGCGCGGCTCACTTCATCAAGAAACAGTTTGTGGGCTCACCC 1471  
 Db 1634 GGGGAGCGCGCTGAGAGAGTGTCTCAACTTCATCCCAACAGTTTCTGGGCTCCCTC 1693  
 QY 1412 GCTTCCACCGCGGAACTGCAAGTTCCAGCGCGGAGAGATGTCCACCTGACACAG 1531  
 Db 1694 GCTTCCACCGCGGAACTGCAAGTTCCAGCGCGGAGAGATGTCCACCTGACACAG 1753  
 QY 1532 AGTCCCTCCGAGCTGGCGAAGAGTCTGTGTGGAACTTTCAGAGCTTGAAGG 1591  
 Db 1754 AGTCCCTCCGAGCTGGCGAAGAGTCTGTGTGGAACTTTCAGAGCTTGAAGG 1813  
 QY 1592 AGAGCAGATCTTGTGTGATCAAGAACAACTCTGAGCTCCATCAAGCTGACATCG 1651  
 Db 1814 AAGAACAAATTTCTGTGTGTAAGAACAACTCTGAGAGATGATCAAGCAGATCG 1873  
 QY 1652 TGACGCGCTTCTGTGATTCAGCTCAGCGCACAGCTCATCTCCAAACGAGCTTCC 1711  
 Db 1874 TCATGCTTCTGTGATTCAGCTCAGCGCACAGCTCATCTCCAAACGAGCTTCC 1933  
 QY 1712 GGGCGAGTACAGGCGCAGGGGCGCGAGCTGTTCAGAACCGGCTCAAGTTCAGG 1771  
 Db 1934 GGGCGAGTACAGGCGCAGGGGCGCGAGCTGTTCAGAACCGGCTCAAGTTCAGG 1993  
 QY 1772 TTGATATCACTTACAGGAGGT-----GGGAGGCGCAGAGAGA 1813  
 Db 1994 TGAATATGCTTCTTGAAGGTCCAGAGCTTCCCGCAGCGGACGAGCGGAGTGT 2053  
 QY 1814 ACGGATCTACTCCGTGACCTTCACTCTGAGGCGCGAGCTTCAAGAGG 1873  
 Db 2054 GTGGCATCTACTCCGTGACCTTCACTCTGAGGCGCGAGCTTCAAGAGG 2113  
 QY 1874 TGTGTGAGACATTCAGGCGCAGCTGTGAGACACAGACCGGCTGCGGCGGAGCACT 1933  
 Db 2114 TGTGTGAGACATTCAGGCGCAGCTGTGAGACATTCAGACACCGCTTCTGTGAGGCTC 2173  
 QY 1934 TGTGACACCACTTACTG 1952  
 Db 2174 TGTGACAGAGAGAGAGCG 2192

Search completed: August 5, 2004, 10:23:16  
 Job time : 668 secs

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: July 29, 2004, 10:21:35 / Search time 19 Seconds  
(without alignments)

1815.060 Million cell updates/sec

Title: US-10-054-579-2

Perfect score: 3497  
Sequence: 1 MTSTGDKGAGQAQVYGPYR.....TNCMENTGRLSKGIIPRS 668

Scoring table: BLOSUM62  
Gapop 10.0, Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA.\*  
1: /cgn2\_6/ptodata/2/1aa/5A COMB.pep.\*  
2: /cgn2\_6/ptodata/2/1aa/5B COMB.pep.\*  
3: /cgn2\_6/ptodata/2/1aa/6A COMB.pep.\*  
4: /cgn2\_6/ptodata/2/1aa/6B COMB.pep.\*  
5: /cgn2\_6/ptodata/2/1aa/PTCUS COMB.pep.\*  
6: /cgn2\_6/ptodata/2/1aa/backfile1.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	3497	100.0	668	4 US-09-930-181-2	Sequence 2, Appl1
2	3028	86.6	585	4 US-09-930-181-4	Sequence 4, Appl1
3	3015	86.6	603	4 US-09-930-181-17	Sequence 17, Appl1
4	796.5	22.8	745	4 US-09-523-849-16	Sequence 16, Appl1
5	793.5	22.7	724	4 US-09-984-880-2	Sequence 2, Appl1
6	792.5	22.7	722	4 US-09-984-880-4	Sequence 4, Appl1
7	790.5	22.6	722	4 US-08-817-832B-32	Sequence 32, Appl1
8	768.5	22.0	729	4 US-08-677-298-2	Sequence 2, Appl1
9	768.5	22.0	729	4 US-09-523-849-33	Sequence 33, Appl1
10	764.5	21.9	793	4 US-09-523-849-32	Sequence 32, Appl1
11	749	21.4	776	4 US-09-523-849-34	Sequence 34, Appl1
12	749	21.4	779	4 US-08-817-832B-31	Sequence 31, Appl1
13	740	21.2	1203	4 US-09-799-875-5	Sequence 5, Appl1
14	729.5	20.9	552	3 US-08-557-006C-40	Sequence 40, Appl1
15	720.5	20.6	633	3 US-08-557-006C-43	Sequence 43, Appl1
16	718.5	20.5	345	3 US-09-101-146-1	Sequence 1, Appl1
17	694.5	19.9	257	3 US-09-101-146-6	Sequence 6, Appl1
18	681	19.5	257	2 US-07-857-224B-25	Sequence 25, Appl1
19	680	19.4	149	4 US-09-930-181-18	Sequence 18, Appl1
20	670.5	19.2	604	4 US-09-523-849-35	Sequence 35, Appl1
21	599.5	17.1	631	4 US-09-579-664B-11	Sequence 11, Appl1
22	523	15.0	290	4 US-09-734-673-4	Sequence 4, Appl1
23	523	15.0	334	4 US-09-523-849-31	Sequence 31, Appl1
24	520.5	14.9	252	2 US-07-857-224B-26	Sequence 26, Appl1
25	515.5	14.7	436	4 US-09-734-673-2	Sequence 2, Appl1
26	515.5	14.7	436	4 US-09-523-849-2	Sequence 2, Appl1
27	506.5	14.5	260	2 US-07-857-224B-27	Sequence 27, Appl1

28	501	14.3	353	3 US-08-688-988-31	Sequence 31, Appl1
29	491.5	14.1	556	4 US-09-800-960-4	Sequence 4, Appl1
30	491.5	14.1	556	4 US-10-096-960-4	Sequence 4, Appl1
31	490	14.0	363	3 US-08-688-988-30	Sequence 30, Appl1
32	488.5	14.0	260	2 US-07-857-224B-28	Sequence 28, Appl1
33	488	14.0	504	4 US-09-554-726A-10	Sequence 10, Appl1
34	485	13.9	339	3 US-08-688-988-33	Sequence 33, Appl1
35	485	13.9	351	3 US-08-688-988-28	Sequence 28, Appl1
36	485	13.9	565	4 US-09-800-960-2	Sequence 2, Appl1
37	485	13.9	565	4 US-10-096-960-2	Sequence 2, Appl1
38	481	13.8	354	3 US-08-688-988-29	Sequence 29, Appl1
39	471.5	13.5	359	3 US-08-688-988-32	Sequence 32, Appl1
40	470.5	13.5	455	4 US-09-554-726A-7	Sequence 7, Appl1
41	469.5	13.4	1037	4 US-09-428-711A-21	Sequence 21, Appl1
42	467.5	13.4	339	3 US-08-688-988-2	Sequence 2, Appl1
43	466.5	13.3	295	2 US-07-951-715A-23	Sequence 23, Appl1
44	466.5	13.3	295	2 US-08-459-448A-23	Sequence 23, Appl1
45	466.5	13.3	295	3 US-08-459-595A-23	Sequence 23, Appl1

## ALIGNMENTS

RESULT 1  
US-09-930-181-2  
Sequence 2, Application US/09930181  
Patent No. 6455292  
GENERAL INFORMATION:  
APPLICANT: Origene Technologies  
TITLE OF INVENTION: 16U 101 V1  
FILE REFERENCE: 16U 101 V1  
CURRENT FILING DATE: 2001-08-16  
NUMBER OF SEQ ID NOS: 18  
SOFTWARE: Patentin version 3.0  
SEQ ID NO 2  
LENGTH: 668  
TYPE: PRT  
ORGANISM: Homo sapiens  
US-09-930-181-2

Query Match 100.0%; Score 3497; DB 4; Length 668;  
Best Local Similarity 100.0%; Pred. No. 1.96-251;  
Matches 668; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	MTSTGDKGAGQAQVYGPYRLEKTLGKGTGVLKGVHCVTQKVAIKIVREKLSSEVL	60
DB	1	MTSTGDKGAGQAQVYGPYRLEKTLGKGTGVLKGVHCVTQKVAIKIVREKLSSEVL	60
QY	61	MKVEREIALTKLIEHPVYKLDHYENKRYLVLEHSGELFDYLVKGRITPREARK	120
DB	61	MKVEREIALTKLIEHPVYKLDHYENKRYLVLEHSGELFDYLVKGRITPREARK	120
QY	121	PRQIIISALDFGSHSICRDLKPENLIDENNRIRADFGASIQVDSLLTSCGSPH	180
DB	121	PRQIIISALDFGSHSICRDLKPENLIDENNRIRADFGASIQVDSLLTSCGSPH	180
QY	181	YACEPIREKXDKGRADVWSCGVLPALLVGLPFDDNNQLLEKRYGVFHHFHP	240
DB	181	YACEPIREKXDKGRADVWSCGVLPALLVGLPFDDNNQLLEKRYGVFHHFHP	240
QY	241	PCQSLIRGMEIVDARRLTLLEHIOKHIWYIGKNEPEEOPIPRKVOIRSLPSLEDDP	300
DB	241	PCQSLIRGMEIVDARRLTLLEHIOKHIWYIGKNEPEEOPIPRKVOIRSLPSLEDDP	300
QY	301	DVLDSHSHSGCPRDRKLLQDLLSEENOEKVIYELLDRKRYSOEDEDLPRENEIDP	360
DB	301	DVLDSHSHSGCPRDRKLLQDLLSEENOEKVIYELLDRKRYSOEDEDLPRENEIDP	360
QY	361	PRKRVDSPLNHNHGRKPRKSMENVLSVTDGSPVPARRAIDMAOHGGRSISGASGL	420
DB	361	PRKRVDSPLNHNHGRKPRKSMENVLSVTDGSPVPARRAIDMAOHGGRSISGASGL	420



QY 421 STPLSPRVTPHSPRGSPLPTPKGTPTVHTPKESPAGTPTPSSPSVGVPMWRALN 480  
 DB 421 STPLSPRVTPHSPRGSPLPTPKGTPTVHTPKESPAGTPTPSSPSVGVPMWRALN 480  
 QY 481 SIKNSFLGSPRRHRRKLOVPTPEEMSNLTPESSPELAKKSMFGNFISLEKEBOIFVVIKQ 540  
 DB 481 SIKNSFLGSPRRHRRKLOVPTPEEMSNLTPESSPELAKKSMFGNFISLEKEBOIFVVIKQ 540  
 QY 541 KPLSLIKADIHAFSLISPLSHSVISQTSFPAEYKAGGPAVPOKPYKFOVDITTYEGGE 600  
 DB 541 KPLSLIKADIHAFSLISPLSHSVISQTSFPAEYKAGGPAVPOKPYKFOVDITTYEGGE 600  
 QY 601 AOKENGIVSVFTLLSGSPRRFKRVEVTIOAQLLSTHDPAPAOHLSDTNCMEMMTGRLS 660  
 DB 601 AOKENGIVSVFTLLSGSPRRFKRVEVTIOAQLLSTHDPAPAOHLSDTNCMEMMTGRLS 660  
 QY 661 KCGIIPKS 668  
 DB 661 KCGIIPKS 668

# RESULT 2 US-09-930-181-4

; Sequence 4, Application US/09930181  
 ; Patent No. 6453292  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Origene Technologies  
 ; TITLE OF INVENTION: Full-length Serine Protein Kinase in Brain and Pancreas  
 ; FILE REFERENCE: 16U 101 V1  
 ; CURRENT APPLICATION NUMBER: US/09/930,181  
 ; CURRENT FILING DATE: 2001-08-16  
 ; NUMBER OF SEQ ID NOS: 18  
 ; SOFTWARE: Patent in version 3.0  
 ; SEQ ID NO: 4  
 ; LENGTH: 585  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 US-09-930-181-4

Query Match  
 Best Local Similarity 100.0%; Pred. No. 1e-216;  
 Matches 577; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 92 YLVLEHVSQGLFPIYLVKKGRLTPKEARKPFROIISALDCHSHICHRDLKXENLLDE 151  
 DB 9 YLVLEHVSQGLFPIYLVKKGRLTPKEARKPFROIISALDCHSHICHRDLKXENLLDE 68  
 QY 152 KNNIRIADFGMASLQVDSILETSCGSPHYACPEVIRGEKYDGKADVWSCGVLFPALLY 211  
 DB 69 KNNIRIADFGMASLQVDSILETSCGSPHYACPEVIRGEKYDGKADVWSCGVLFPALLY 128  
 QY 212 GALPDDNLRQLEKXKRGVFMHPHTIPDCCSLRGMTEDVAARLTLEHTOKHIIWYI 271  
 DB 129 GALPDDNLRQLEKXKRGVFMHPHTIPDCCSLRGMTEDVAARLTLEHTOKHIIWYI 188  
 QY 272 GGNKEPEPEQPIPRKVOIRSLPSLEDIDPVLDSMHSIGCFRDNRKLLQDLLSEENQEX 311  
 DB 189 GGNKEPEPEQPIPRKVOIRSLPSLEDIDPVLDSMHSIGCFRDNRKLLQDLLSEENQEX 248  
 QY 332 MIYLLLDKXERYSOEDEDLPKNEIDPPKRVDSMLNRAGKRRERKSMVLSVTDG 391  
 DB 249 MIYLLLDKXERYSOEDEDLPKNEIDPPKRVDSMLNRAGKRRERKSMVLSVTDG 308  
 QY 392 GSPPARAIEMAHQGRSRSISGASSGLSTPSASRYVTPHSPRGSPLPTPKGTPTVHT 451  
 DB 309 GSPPARAIEMAHQGRSRSISGASSGLSTPSASRYVTPHSPRGSPLPTPKGTPTVHT 368  
 QY 452 PKESPAGTPTPSSPSVGVPMWRALNLSKNSFLGSPRRHRRKLOVPTPEEMSNLTPE 511  
 DB 369 PKESPAGTPTPSSPSVGVPMWRALNLSKNSFLGSPRRHRRKLOVPTPEEMSNLTPE 428  
 QY 512 SSPELAKKSMFGNFISLEKEBOIFVVIKDKPELSSIKADIHAFSLISPLSHSVISQTSF 571

DB 429 SSPELAKKSMFGNFISLEKEBOIFVVIKDKPELSSIKADIHAFSLISPLSHSVISQTSF 488  
 QY 572 AEVKATGGPAVPOKPYKFOVDITTYEGGEAOKENGIVSVFTLLSGSPRRFKRVEVTIOA 631  
 DB 489 AEVKATGGPAVPOKPYKFOVDITTYEGGEAOKENGIVSVFTLLSGSPRRFKRVEVTIOA 548  
 QY 632 QLLSTHDPAPAOHLSDTNCMEMMTGRLSKCGIIPKS 668  
 DB 549 QLLSTHDPAPAOHLSDTNCMEMMTGRLSKCGIIPKS 585

# RESULT 3 US-09-930-181-17

; Sequence 17, Application US/09930181  
 ; Patent No. 6453292  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Origene Technologies  
 ; TITLE OF INVENTION: Full-length Serine Protein Kinase in Brain and Pancreas  
 ; FILE REFERENCE: 16U 101 V1  
 ; CURRENT APPLICATION NUMBER: US/09/930,181  
 ; CURRENT FILING DATE: 2001-08-16  
 ; NUMBER OF SEQ ID NOS: 18  
 ; SOFTWARE: Patent in version 3.0  
 ; SEQ ID NO: 17  
 ; LENGTH: 603  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 US-09-930-181-17

Query Match  
 Best Local Similarity 99.7%; Pred. No. 9.9e-216;  
 Matches 574; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 72 LIHPHVLKLDVYENKRYLVLEHVSQGLFPIYLVKKGRLTPKEARKPFROIISALDF 131  
 DB 1 LIHPHVLKLDVYENKRYLVLEHVSQGLFPIYLVKKGRLTPKEARKPFROIISALDF 60  
 QY 132 CHSHICHRDLKPEXLLDEKNNIRIADFGMASLQVDSILETSCGSPHYACPEVIRGEK 191  
 DB 61 CHSHICHRDLKPEXLLDEKNNIRIADFGMASLQVDSILETSCGSPHYACPEVIRGEK 120  
 QY 192 YDGRKADVWSCGVILFALLVGLPDDNLRQLEKXKRGVFMHPHTIPDCCSLRGMT 251  
 DB 121 YDGRKADVWSCGVILFALLVGLPDDNLRQLEKXKRGVFMHPHTIPDCCSLRGMTS 180  
 QY 252 EYDARRLTLEHIOGHIIWYITGGKNEPEPEQPIPRKVOIRSLPSLEDIDPVLDSMHSIGC 311  
 DB 181 EYDARRLTLEHIOGHIIWYITGGKNEPEPEQPIPRKVOIRSLPSLEDIDPVLDSMHSIGC 240  
 QY 312 FDRNRKLLQDLLSEENQEXMIYLLLDKXERYSOEDEDLPKNEIDPPKRVDSPLYLN 371  
 DB 241 FDRNRKLLQDLLSEENQEXMIYLLLDKXERYSOEDEDLPKNEIDPPKRVDSPLYLN 300  
 QY 372 RHGKRRPRKSMVLSVTDGSPVPARAIEMAHQGRSRSISGASSGLSTPSLSRYT 431  
 DB 301 RHGKRRPRKSMVLSVTDGSPVPARAIEMAHQGRSRSISGASSGLSTPSLSRYT 360  
 QY 432 PHSPRGSPLPTPKGTPTVHTPKESPAGTPTPSSPSVGVPMWRALNLSKNSFLGSPR 491  
 DB 361 PHSPRGSPLPTPKGTPTVHTPKESPAGTPTPSSPSVGVPMWRALNLSKNSFLGSPR 420  
 QY 492 FHRRLQVPTPEEMSNLTPESSPELAKKSMFGNFISLEKEBOIFVVIKDKPELSSIKADI 551  
 DB 421 FHRRLQVPTPEEMSNLTPESSPELAKKSMFGNFISLEKEBOIFVVIKDKPELSSIKADI 480  
 QY 552 HAFSLISPLSHSVISQTSFPAEYKATGGPAVPOKPYKFOVDITTYEGGEAOKENGIVSVT 611  
 DB 481 HAFSLISPLSHSVISQTSFPAEYKATGGPAVPOKPYKFOVDITTYEGGEAOKENGIVSVT 540  
 QY 612 FTLLSGSPRRFKRVEVTIOAQLLSTHDPAPAOHLSD 647  
 DB 541 FTLLSGSPRRFKRVEVTIOAQLLSTHDPAPAOHLSE 576



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RESULT 4
US-09-523-849-36
; Sequence 36, Application US/09523849
; Patent No. 6438561
; GENERAL INFORMATION:
; APPLICANT: Bandman, Olga
; APPLICANT: Molteni, Angela
; APPLICANT: Magnaghi, Paola
; APPLICANT: Bosotti, Roberta
; APPLICANT: Scacchi, Emanuela
; APPLICANT: Isacchi, Antonella
; APPLICANT: Hodgson, Dave
; TITLE OF INVENTION: HUMAN NIM1 KINASE
; FILE REFERENCE: PC-0009 US
; CURRENT APPLICATION NUMBER: US/09/523,849
; CURRENT FILING DATE: 2000-03-13
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PERL Program
; SEQ ID NO 36
; LENGTH: 745
; TYPE: PRF
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Genbank Accession No. 6458561 51749794
US-09-523-849-36

Query Match      22.8%; Score 796.5; DB 4; Length 745;
Best Local Similarity 29.1%; Pred. No. 6,4e-51;
Matches 224; Conservative 120; Mismatches 243; Indels 183; Gaps 21;

QY 10 AOHAYVGYRLEKTLGKQGTGLVKGVCVTCQKVAIKIVNREKLSVLMKVEREIAI 69
DB 11 ADEQPHIGNYRLTKTIKGNPAKVKLARHILTGKEVAVKIIDQTQINSSSLQKLFREVR 70
QY 70 LKLEHPIVYKLDHYENKKTLYLVLEHVSGETFDLYVKKGRLLPKEARKFRQIISAL 129
DB 71 MKVILHPIVYKLFVIEETKTLVYVMEYASGEVFDYLVAGRMKEKEARAKFRQIVSAV 130
QY 130 DFCSHSICHRDLKPEMLLDEKNNIRIADFGMASLQVGSLLFTSCSPHYACEVIRG 189
DB 131 QYCHQKFIYHRDLKAEMLLDADNMKIKIADFGFSNEFTFGKLDTPCGSPYAAPELFG 190
QY 190 EKYDGRKADVWSCGVIILFALLVGLPDDDNIRQLLEKYKRGVFMHPIFPDCCSLRG 249
DB 191 KKYDGEVDVWSLGVILYTLVSGSLPFDQNLKELREVRIRGKRIIPFYMSIDCENLTK 250
QY 250 MIEVDAAARLTLEHIQKHIWYIGKNEPEPEQPIPRKYOIRSLPSELDIDPVLDSMSTL 309
DB 251 FLILNPSKRGTLQIMKDRMNVGHEDDE-----LKPYEPLPYK--DPRRTELMSM 302
QY 310 GCFRDNKLLQDLLESEENOEMKIYFLLDRKERYPSQEDBDLPPENEID----- 359
DB 303 GYTRRE-----IDSLVGRVNEVMATYLLLGKSSLEBDITLLKPRPSADLTNNSAQPFS 359
QY 360 -----PBRKRVVS-----PMLNPHGK-----RRPE-----RKSM----- 383
DB 360 HKVGRSVSANPKQRFSQAGPALFTNSYSKKTQSNNAENKREEDRESGRKASSTAKY 419
QY 384 -----EVLSTVDG-----GSPVPARALEMA--CHGQRSISG--A 416
DB 420 PASPLPGLERKKTPTPTSTNSVLSTSTRNSPDLBRASLQASIONGDSLTMPBSRA 479
QY 417 SSGISTSLGSPRTPH-----PSPRGSPLPPTPKTPTVHTPESPA-- 457
DB 480 STASASVAASARPRQHQKMSASVHPKASGLPPTBSNCEVFPSTAPORVPAVSASAH 539
QY 458 -----GTPNPT-----PPSSPVGVGPVWRALNS 481
DB 540 NISSSGGAPDRITNPRGVSSSTFHAGQLRQVDOQNLPGVTPASVSGHSQGRGASGS 599
QY 482 IKNSFLGSPRFRHRLQVP--TPREMSNLTP-----SSPELAKSM--FG 523

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RESULT 5
US-09-984-890-2
; Sequence 2, Application US/09984890
; Patent No. 6492156
; GENERAL INFORMATION:
; APPLICANT: VAN, Chunhua et al.
; TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
; TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
; FILE REFERENCE: CLO01306
; CURRENT APPLICATION NUMBER: US/09/984,890
; CURRENT FILING DATE: 2001-10-31
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 724
; TYPE: PRF
; ORGANISM: Homo sapiens
US-09-984-890-2

Query Match      22.7%; Score 793.5; DB 4; Length 724;
Best Local Similarity 29.8%; Pred. No. 1e-50;
Matches 216; Conservative 115; Mismatches 248; Indels 145; Gaps 19;

QY 10 AOHAYVGYRLEKTLGKQGTGLVKGVCVTCQKVAIKIVNREKLSVLMKVEREIAI 69
DB 44 ADEQPHIGNYRLTKTIKGNPAKVKLARHILTGKEVAVKIIDQTQINSSSLQKLFREVR 103
QY 70 LKLEHPIVYKLDHYENKKTLYLVLEHVSGETFDLYVKKGRLLPKEARKFRQIISAL 129
DB 104 MKVILHPIVYKLFVIEETKTLVYVMEYASGEVFDYLVAGRMKEKEARAKFRQIVSAV 163
QY 130 DFCSHSICHRDLKPEMLLDEKNNIRIADFGMASLQVGSLLFTSCSPHYACEVIRG 189
DB 164 QYCHQKFIYHRDLKAEMLLDADNMKIKIADFGFSNEFTFGKLDTPCGSPYAAPELFG 223
QY 190 EKYDGRKADVWSCGVIILFALLVGLPDDDNIRQLLEKYKRGVFMHPIFPDCCSLRG 249
DB 224 KKYDGEVDVWSLGVILYTLVSGSLPFDQNLKELREVRIRGKRIIPFYMSIDCENLTK 283
QY 250 MIEVDAAARLTLEHIQKHIWYIGKNEPEPEQPIPRKYOIRSLPSELDIDPVLDSMSTL 309
DB 284 FLILNPSKRGTLQIMKDRMNVGHEDDE-----LKPYEPLPYK--DPRRTELMSM 335
QY 310 GCFRDNKLLQDLLESEENOEMKIYFLLDRKERYPSQEDBDLPPENEIDPVRKVDSP 368
DB 336 GYTRRE-----IDSLVGRVNEVMATYLLLGKSSLEBDITLLKPRPSADLTNNSAQPFS 392
QY 369 -MLNHRGRRPBRKRVSVLSTVDGSPVPA-----RALEMAQHQRSS 412
DB 393 HKVGRSVSANPKQRFS-----DQAGPALFTNSYSKKTQSNNAENKREEDRESGRKAS 448
QY 413 ISGASGLSTSP-----LSSEPTVPHPS-----PRGSP----- 441
DB 449 -----TAKYVASPLPGLERKKTPTPTSTNSVLSTSTRNSPDLBRASLQASIONGKDS 504
QY 442 PTPKGTPTVHTPK--ESPAGTPNPT-----PPSS 467
DB 505 TAPORVPAVSFAHNISISSGAPDRITNPRGVSSSTFHAGQLRQVDOQNLPGVTPAS 564
QY 468 PSVGVPMARLALNSINSLGSPRFRHRLQVP--TPREMSNLTP----- 510

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Db 565 PSCHSGCRGASGSISFSEKF--TSKTFVRNNLNEPESKDRVTLAPHYVGGSGNDKEKFEPR 622  
Qy 511 ESSBELAKKSM-FGNFISLEKEQIFVYIKDKPLSIKADIYAHFISBSLSHVSISQTS 569  
Db 623 EAKRSRLFTWSMKTTSMEPNEMRRIKRYLDANSQSLHKKYMLL--CMHGTPGHED 680  
Qy 570 FRAYKATGPAVQKRVKQVQVDTTYTEGGEAKKENGIVSYTTLISGSPRRKRVETI 629  
Db 681 F-----VQWEMEVC-----KLPRSLNGVRFKRISGTSMAFKNIASKI 718  
Qy 630 QAOCL 633  
Db 719 ANEL 722

RESULT 6  
US-09-984-890-4  
Sequence 4, Application US/09984890  
Patent No. 6492156  
GENERAL INFORMATION:  
APPLICANT: YAN, Chunhua et al.  
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC  
ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES  
FILE REFERENCE: CLO01306  
CURRENT APPLICATION NUMBER: US/09/984,890  
CURRENT FILING DATE: 2001-10-31  
NUMBER OF SEQ ID NOS: 4  
SOFTWARE: FASTSEQ for Windows Version 4.0  
SEQ ID NO: 4  
LENGTH: 722  
TYPE: PRT  
ORGANISM: Rattus norvegicus  
US-09-984-890-4

Query Match 22.7%; Score 792.5; DB 4; Length 722;  
Best Local Similarity 30.2%; Pred. No. 1.2e-50;  
Matches 217; Conservative 115; Mismatches 251; Indels 135; Gaps 18;

Qy 10 AQHAGVGPYRLEKTLGSGGTGLVGLGVCCTCKVAIKIYNREKLSSEVLMKVEREIAI 69  
Db 44 ADEGPHIGNYRLKTIKGNPAKYLARHILITGEVAVKIIDTQLNSSLQKLFREYRI 103  
Qy 70 LKLIHPPHVLKLDVYENKRYLYVLEHVSGBELFDYLVKKGRLLTPREARKFRQIISAL 129  
Db 104 MKVLNHPNIYVLFVETETKLLYVMEYASGGEVFDYLVAGHMKKEARAKFRQIVSAV 163  
Qy 130 DFGCHSHICRDLKPENNILDEKNNIRIADFGMASLQVGSLSLETSGSPHYACPEYIRG 189  
Db 164 QYCHQKTIYHDLKRAENLLDADNNIKIADFGFNSNETFGKRLDTFGSPHYAABELFQG 223  
Qy 190 EKYDGRKADVWSCGVIIFALLVGALEPDDNLRQLLEKVRGVFHMHPFIPDDQSLIRG 249  
Db 224 KKYDGPEDVWSLGVILYTLVSGSLPFDGQNLKELREYVIRGKYRIPIFYVSTDCENLLKX 283  
Qy 250 MIEVDARLRLLEHICHIYVIGKNEPEPQPIPRVQVRSLSLEDIDPDVLDMSHSL 309  
Db 284 FLINLPRKGTLEIMDRMNNVGHEDD-----LPRYVEPLPDYK--DPRKTELMVSK 335  
Qy 310 GCFPRDKLQDLISEENOEMKIFLLDRKERYPSODEDLPFRYEID----- 359  
Db 336 GYTRHE--IDSLVGQRVYRVATYLLGYKSELEGDITTLKPRASADLTNSAPSPS 392  
Qy 360 -----PPKRVDS-----PMANRHK-----RPRP-----RKSMEVLSYND 390  
Db 393 HKVORSVSNFKQRRSSDQAVPALFTSNYSKTKQSNNAENKRPFEETGRKASTAKVP- 451  
Qy 391 GGSVPARARAIEMHQGRSRISGASSGLSTSP-----SSPRTVTH 433  
Db 452 -ASLPLGDLDRKKTPTSTSTNSVLSTNNRGRNSLLDRASLQGASTONGSDSTAPRVPY 510  
Qy 434 PSPRGSPLPFPKGTPTVHTPKESPAGT-----ENPPTPSSPSVGVY 473

Db 511 ASPSAHNISSSSGAPDR--NFPRGVSSRSTFHAGQLRQVRDQCNLPFGVTPASPSSHSQ 568  
Qy 474 PWRALNISTKNSFLSGPFRHRLQVP-TPEKNNLTP-----ESSPEL 516  
Db 569 GRGAGSGSIFSEKF--TSKTFVRNNLNEPESKDRVTLAPHYVGGGTDXKEEPEAKPRS 626  
Qy 517 AKKSM-FGNFISLEKEQIFVYIKDKPLSIKADIYAHFISBSLSHVSISQTSFPAEYK 575  
Db 627 LRFWSMKTTSMEPNEMRRIKRYLDANSQSLHKKYMLL--CVHGTGHEMF----- 679  
Qy 576 ATGPAVQKRVKQVQVDTTYTEGGEAKKENGIVSYTTLISGSPRRKRVETI 633  
Db 680 -----VQWEMEVC-----KLPRSLNGVRFKRISGTSMAFKNIASKI 720

RESULT 7  
US-08-817-832B-32  
Sequence 32, Application US/08817832B  
Patent No. 6579691  
GENERAL INFORMATION:  
APPLICANT: MANDELKOM, Eckhard, et al.  
TITLE OF INVENTION: No. 6579691el Protein Kinase (NPK-110)  
NUMBER OF SEQUENCES: 32  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Marshall, O'Toole, Getstein, Murray & Borun  
STREET: 233 S. Wacker Drive, 6300 Sears Tower  
CITY: Chicago  
STATE: Illinois  
COUNTRY: US  
ZIP: 60606-6402  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.30 (EPO)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/817,832B  
FILING DATE: 28-APR-1997  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: WO PCT/EP95/04258  
FILING DATE: 30-OCT-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: EP 94 11 7122.5  
FILING DATE: 28-OCT-1994  
INFORMATION FOR SEQ ID NO: 32:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 722 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-817-832B-32

Query Match 22.6%; Score 790.5; DB 4; Length 722;  
Best Local Similarity 30.2%; Pred. No. 1.7e-50;  
Matches 217; Conservative 115; Mismatches 251; Indels 135; Gaps 18;

Qy 10 AQHAGVGPYRLEKTLGSGGTGLVGLGVCCTCKVAIKIYNREKLSSEVLMKVEREIAI 69  
Db 44 ADEGPHIGNYRLKTIKGNPAKYLARHILITGEVAVKIIDTQLNSSLQKLFREYRI 103  
Qy 70 LKLIHPPHVLKLDVYENKRYLYVLEHVSGBELFDYLVKKGRLLTPREARKFRQIISAL 129  
Db 104 MKVLNHPNIYVLFVETETKLLYVMEYASGGEVFDYLVAGHMKKEARAKFRQIVSAV 163  
Qy 130 DFGCHSHICRDLKPENNILDEKNNIRIADFGMASLQVGSLSLETSGSPHYACPEYIRG 189  
Db 164 QYCHQKTIYHDLKRAENLLDADNNIKIADFGFNSNETFGKRLDTFGSPHYAABELFQG 223  
Qy 190 EKYDGRKADVWSCGVIIFALLVGALEPDDNLRQLLEKVRGVFHMHPFIPDDQSLIRG 249  
Db 224 KKYDGPEDVWSLGVILYTLVSGSLPFDGQNLKELREYVIRGKYRIPIFYVSTDCENLLKX 283

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QY 250 MIEVDARLLEHIOKHIWYIGKNEPEEQPIPRKVQIRSLPSLEDIDPDVLDMSHSL 309
DB 284 FLINPFRKGLDQIMKDRMNNVGHEDDE-----LKPVEPLPDYK--DPRTELWVK 335
QY 310 GCFDRNKLLODLISEENOEMKIFLLDRKERYPEQDEDLPRNEID----- 359
DB 336 GYTRFE---IQDSLVGGRNVEWATYLLGLYKSELEGDITILKPRSAULTMSASPS 392
QY 360 -----PPKRVDS-----PMLNRHK-----RPE---RKSMEVLSYTD 390
DB 393 HKYQSVSANPKQRRSSDOAVPALPITSNSYSKTKQSNMNAENKRPBEETGKASTAKVP- 451
QY 391 GGSVPARARAIEMAHQGRSRISGASSGSTSPL-----SSPRVTPH 433
DB 452 -ASPLPGLDRKKTTPPTSTNSVLTSTNRSNSFLDRASLGQASTONGKSTAPQRPV 510
QY 434 PSPRGSPLPTPKGTPVHTPKESPAGT-----ENPTPSSPSVGV 473
DB 511 ASPAHNMISSSGAPDRT--NFRGVSSRSTFHAGQLRQVDOQNLFFGVTPASPSGHSQ 568
QY 474 PWRRLNSIKNSFGSRFRHRLQVP--TPBMSNLTLP-----ESPEL 516
DB 569 GRKPSGSIFSKF--TSKPRRNINPEESKQVETLPHVVGCGGTDKEKEPREAKPRS 626
QY 517 AKKSN-FGNFSLKEKEQIFVYIKDKPLSSIKADIVAHFLSPSLSHSVISQTSFRAEYK 575
DB 627 LRFWSMKTTSSMPEMMEIRKVLANSQSELSHRWYLL--CVHGTGHEMF----- 679
QY 576 ATGSPAVFQKPKQVDITYTEGGEAQKNGIYVTTLSGPRKRVETIQAO 633
DB 680 -----VQWEMEVC-----KLPRLSLNGVRKIRISGSMAPKIASKIAMEL 720

RESULT 8
US-08-677-298-2
; Sequence 2, Application US/08677298
; Patent No. 5863729
; GENERAL INFORMATION:
; APPLICANT: Pimlico-Worms, Helen
; TITLE OF INVENTION: DNA SEQUENCES ENCODING HUMAN TCAP-1
; TITLE OF INVENTION: KINASE
; NUMBER OF SEQUENCES: 17
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Greenlee, Winner and Sullivan, P.C.
; STREET: 5370 Manhattan Circle, Suite 201
; CITY: Boulder
; STATE: CO
; COUNTRY: USA
; ZIP: 80303
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/677,298
; FILING DATE: 09-JUL-1996
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: Caruthers, Jennie M.
; REGISTRATION NUMBER: 34,464
; REFERENCE/DOCKET NUMBER: 9-96
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (303) 499-8080
; TELEFAX: (303) 499-8089
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 729 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-677-298-2

```

```

Query Match 22.0% Score 768.5; DB 2; Length 729;
Best Local Similarity 30.1%; Pred. No. 7,4e-49;
Matches 217; Conservative 111; Mismatches 255; Indels 137; Gaps 19;

QY 10 AQAQVGYRLEKTLGKGQGLVFLGVHCVTCQKVAIKYNNREKLSVLMKVEREIAI 69
DB 47 ADEQPHIGNYRLTKTGKGNFAKYLARHILTGREVAIKIDKQINPTISLOKLFREYRI 106
QY 70 LKLIHPHLYKLDHYENKKTLYLVLEHVSQGEPLDYVKKGRLLPTKEARKFRQIISAL 129
DB 107 MKLILNHPNIVKLFETLETKLYLIMEYASGGEVFDLYVAQRKWEKAKSRFQIVANV 166
QY 130 DCHSHSICHRDLKEKNLIDKNNIRIADFGMASLQVDSLLETSCSPHYACEVIRG 189
DB 167 QYCHQKRIYHRDLKXENLLLDADNMTKADFGSNSEFTVGGKLDTFCCSPYABELFQ 226
QY 190 EKYDGRKADVMSGCVILFALLVGAIPDDDNRLQLLEKYGAVFEMPHFIPDQCQLRG 249
DB 227 KKYDGEVDVWSLGVILYLVGSLPFDQNLKEIREERVLGKXAIPEYMTSDCENILKR 286
QY 250 MIEVDARLLEHIOKHIWYIGKNEPEEQPIPRKVQIRSLPSLEDIDPDVLDMSHSL 309
DB 287 FLVLPFKGTLFQIMKDRMNNVGHEDDELPKRVF-----PELSDIDQKRIIDWGM 338
QY 310 GCFDRNKLLODLISEENOEMKIFLLDRKERYPSQED-EDLPPEIDPPKRVDS 368
DB 339 GYQGE---IQSLSKMKYDEITATYLLGRKS---SELDASDSSSSNLSLAKVRPSD 392
QY 369 MNRQKRRPERKSEVSYTD-----GSPVAPARAI-----EMAHQGR 409
DB 393 LNNSTG-OSPHKRVQSVSSQKQRRYSDHAGPALPSVAYIKKQTSIADGDLKEDGIS 451
QY 410 SRSISGASSGLSTSPSSPRTVPHSPSPPGSPPLPTPKGTPVHTPKESPA----- 457
DB 452 SRKSSGSAVGKGIAPASPMLGNAENPNKADIPERKKSST--VPSNTASGQWTRNTYVC 510
QY 458 -----GTPNTPPS-----SPGVGVPMWARRL--NSINSLGSR 491
DB 511 SERTADRHVSIQNGENSTIPDQTPVASTHSSAATPDRIIRPGTASSTHGOBR 570
QY 492 FHRRLQVPTPEMSNLTPESSPELAKS-----WGNFIS-LEKEEQIFVYIKD----- 540
DB 571 -ERRTATNGPASPASHAATPLQTRGRSTNLFSLKTSKLTSSRNASAQDENKEA 629
QY 541 KPLSSIKADIVAHFLSPSLSHSVISQTSFRAEYATGQ--PAVQKPKQVFD----- 592
DB 630 KPRS-----LRFWSMKTTSSMDGDMREIRKVLANDANCDY 666
QY 593 -----ITYTEGGEAQKEN-----GIYSVFTLLSGSRFRKRVETIQAO 632
DB 667 EQERFLPFCVHGDHAENLVQWEMEVCKLPRLSLNGVRFKISGSIASFKIASKIANE 726
QY 633 L 633
DB 727 L 727

RESULT 9
US-09-523-849-33
; Sequence 33, Application US/09523849
; Patent No. 6458561
; GENERAL INFORMATION:
; APPLICANT: Bandman, Olga
; APPLICANT: Moiteni, Angela
; APPLICANT: Magnaghi, Paola
; APPLICANT: Boscelli, Roberta
; APPLICANT: Scacheri, Emanuela
; APPLICANT: Isaacchi, Antonella
; APPLICANT: Hodgson, Dave
; TITLE OF INVENTION: HUMAN NIM1 KINASE
; FILE REFERENCE: PC-0009 US
; CURRENT APPLICATION NUMBER: US/09/523,849

```

```

; CURRENT FILING DATE: 2000-03-13
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PERL Program
; SEQ ID NO 33
; LENGTH: 729
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: GenBank Accession No. 6458561 g3089349
US-09-523-849-33

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```

Query Match      22.0%; Score 768.5; DB 4; Length 729;
Best Local Similarity 30.1%; Pred. No. 7.4e-49;
Matches 217; Conservative 111; Mismatches 256; Indels 137; Gaps 19;

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QY 10 AQAAGVARYLETKGQGTGLVKGVCCTCOKVAIKIVNREKLSSEYLMKVERIAI 69
DB 47 ADEQGHIGNVRLTKTIGKGFPAKYLARHILTGREVAIKIDTQNLPSLQGLFREVMIMKLN 106
QY 70 LKLEHPVRLKLDVYENKLYLVLEHVSQGLFDYLYKKGRLLTPREARKFPQIISAL 129
DB 107 MKLHNPVIVKLFVIEITKTLVLMEXYASGEVFYLVAHGMRKEKAKRQIVSAV 166
QY 130 DFCSHSICRDLRPNILDERKNRIADFGMASLQVGSLLTSSGSPHYACPEYIRG 189
DB 167 QYCHQKRIVHRDLAENLLDADNMIKIDFGFSNETVGGKLDLTFGSPYAPALFQ 226
QY 190 EKYDGRKADVSCGVLIFALLVGLPDDNLRQLLEKVGKGFVHMFPIPPCOSLIRG 249
DB 227 KKYGPEDVWVSLGVLITLVSGSLPFDGQNLKELRERVLKGRKRIFFVMSIDCENLKR 286
QY 250 MIEVDAAERLLENIQKHIVYIGKNEPEPEQIPRKVQIRSLPSLEDIDPDVLDMSHL 309
DB 287 FLVNPRIKRGLEIMDRMINAGHEDELKPFVE-----PELDISQKRDIMVGM 338
QY 310 GCFRDNKLDLSEENQEKMTYFLILDRKERYPSQED-EDLPNNEIDPPREKVDSP 368
DB 339 GYSQGE---IQPSLSKMTYDEITATYLLGRKS---SELDASDSSSSNLSLAKVRSSD 392
QY 369 MLNRHKKRPERKSENEVLSTVD-----GGSPVPARRAI-----EMAHQGR 409
DB 393 LNNSTG--QSPHKKVQRSVSSQKORRYSDHAGPAIPSVAVPPKRSQSTADGDLKEDGIS 451
QY 410 SRSISGASSGSLSTPSLSEPVTPHPSPRGSPLTPKGPVPTPKESPA-----457
DB 452 SRKSSGSAVGGKGIAPASPMLGANSPKADIPERKKSST-VPSNSNTASGCMTRNTYVC 510
QY 458 -----GTNPPTPS-----SPSVGGVPWRARL---NSIKNSFLGSPR 491
DB 511 SERTADRHVITQNGKENSTIPDQRTPVASTHSISASATPDRIRPFRGTASRSTFGQPR 570
QY 492 FHRRLQVPTPEMSNLTPESSPELAKS-----WFGNFTS-LEKEQIIVLIKD-----540
DB 571 -ERRATVNGPPASPSSISHEATPLSQTSSRGSTNLFSKLTSLRSNNVSAEQDENKEA 629
QY 541 KPLSIKADIHAFLISPLSHSVISQTSFPAEYKATGG--FAVQKPVFVOYD-----592
DB 630 KPRS-----LRFWSMKTTSSMDPGDMKEIKVLDANNCDY 666
QY 593 -----ITYTSGEAQKN-----GIYVTFLLSGPERRPRVETIQAQ 632
DB 667 EQRERFLFLCVHGGHAENLVQWEMEVCKLPRLSLNGVRFKRISGTSIAFNIAASKIANE 726
QY 633 L 633
DB 727 L 727

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```

RESULT 10
US-09-523-849-32
; Sequence 32, Application US/09523849
; Patent No. 6458561

```

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; GENERAL INFORMATION:
; APPLICANT: Bandman, Olga
; APPLICANT: Molteni, Angela
; APPLICANT: Magnaghi, Paola
; APPLICANT: Bosotti, Roberta
; APPLICANT: Scacheri, Emanuela
; APPLICANT: Isacchi, Antonella
; APPLICANT: Hodgson, Dave
; TITLE OF INVENTION: HUMAN NIM1 KINASE
; FILE REFERENCE: PC-0009 US
; CURRENT APPLICATION NUMBER: US/09/523,849
; CURRENT FILING DATE: 2000-03-13
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PERL Program
; SEQ ID NO 32
; LENGTH: 793
; TYPE: PRT
; ORGANISM: Rattus norvegicus
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: GenBank Accession No. 6458561 g2052189
US-09-523-849-32

```

```

Query Match      21.9%; Score 764.5; DB 4; Length 793;
Best Local Similarity 32.7%; Pred. No. 1.6e-48;
Matches 193; Conservative 94; Mismatches 185; Indels 119; Gaps 14;

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```

QY 15 YGPRYLETKLGQGTGLVKGVCCTCOKVAIKIVNREKLSSEYLMKVERIAI 74
DB 56 HIGNVRLQTKIGKGFPAKYLARHILTGREVAIKIDTQNLPSLQGLFREVMIMKLN 115
QY 75 HPHVRLKLDVYENKLYLVLEHVSQGLFDYLYKKGRLLTPREARKFPQIISALDFCHS 134
DB 116 HNPVIVKLFVIEITKTLVLMEXYASGEVFYLVAHGMRKEKAKRQIVSAVOYHQ 175
QY 135 HSICRDLRPNILDERKNRIADFGMASLQVGSLLTSSGSPHYACPEYIRGEXTD 194
DB 176 KCIYVRDLKAEENLLDADNMIKIDFGFSNETVGGKLDLTFGSPYAPALFQKXKDG 235
QY 195 RKADVSCGVLIFALLVGLPDDNLRQLLEKVGKGFVHMFPIPPCOSLIRGMLIEVD 254
DB 236 PEVDVWVSLGVLITLVSGSLPFDGQNLKELRERVLKGRKRIFFVMSIDCENLKLVLN 295
QY 255 AARLTLERIQKHIVYIGKNEPEPEQIPRKVQIRSLPSLEDIDPDVLDMSHLGCFRD 314
DB 296 PIKRGSLQIMDRMINAGHEEB-----LKYSPPELINDAKRIDIMVTWGFARD 347
QY 315 RNKLLQDLSEENQEKMTYFLILDRK-----341
DB 348 E---INDALVSGKYDEVATYILLGRKPEPEGGESLSSGNLQCRSPSSDLNNSTLOSP 404
QY 342 -----ERYPSQEDEDLPP-----RNEIDPPKRV-DSFMLNRHKKR 376
DB 405 AILKTVQRSANQKRRFSDHAGPSIIPPAVGYTKRPOANSVSEQKEWMDOTARRLGST 464
QY 377 R-----PERKSEV---LSVTGGSPVPARRAI-----EMAHQGRSR 411
DB 465 TVGSKSEVYASPLVDPDRKSSAGPSNNVYSGSGSTRTNTYCEKSTDRYALANGRSS 524
QY 412 SISGASSGSLSTPSLSEPVTPHPSPRGSPLTPKGPVPTPKESPA-----458
DB 525 LTEMASMSSTGSIYVAGSAPRARRHOKMSSTSHPIKYVLLPTIKDSEAYRP-----G 579
QY 459 TNPPTPSGSPVGV-----PWRARL---NSIKNSFLGSPRHRKRLQVPTP 502
DB 580 TAQRVPAASPASHSISASTPDRTPRGGSSSRSTFGHQLRERKSAAYSGP 630

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RESULT 11
US-09-523-849-34
; Sequence 34, Application US/09523849
; Patent No. 6458561
; GENERAL INFORMATION:

```

```

; APPLICANT: Bandman, Olga
; APPLICANT: Molteni, Angela
; APPLICANT: Magnaghi, Paola
; APPLICANT: Bosetti, Roberta
; APPLICANT: Scacchi, Emanuela
; APPLICANT: Isacchi, Antonella
; APPLICANT: Hodgson, Dave
; TITLE OF INVENTION: HUMAN NIM1 KINASE
; FILE REFERENCE: PC-0009 US
; CURRENT APPLICATION NUMBER: US/09/523,849
; CURRENT FILING DATE: 2000-03-13
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PERL Program
; SEQ ID NO 34
; LENGTH: 776
; TYPE: PRT
; ORGANISM: Rattus norvegicus
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: GenBank Accession No. 6458561 95672676
US-09-523-849-34

Query Match          21.4%; Score 749; DB 4; Length 776;
Best Local Similarity 31.5%; Pred. No. 2.3e-47;
Matches 214; Conservative 87; Mismatches 223; Indels 156; Gaps 20;

4  TGKDGGAQHAQYGPYPLEKTLGKGTGLVKGVCVTCCKVAIKVNEKLSSEVIMKY 63
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
12  TGTGQGGQKPLRVGFYVERTLGKGNFAVVKLARHRYTKQVAKIKIDKTRLSSNLEKI 71
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
64  EREIAIKLLEHPIVTLKLDHYENKKYLYLVLEHVSQGELEFDYLVKKGRITPEAKRFR 123
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
72  YREVQLKLNHPIIILKYQVMEKMDLYITEFAKNGEFDILTSNGHISENARKKW 131
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
124  QIISALDFCHSHSICRDLKRENILDEKKNIRIADFGMAASLOVGSLLFTSCGSPHYAC 183
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
132  QILSAVYCHNHIVHDLKTEMLLDGNDIKIADFGFNFKYFGEPSTWCGSPHYAA 191
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
164  PEVIRGKRYGRKADVASCVILFALLVGALEPDDNLRQLLEKVRKGFHMHFIIPDC 243
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
192  PEVEGEYEGEPQDLIVSLGVLVVCGSLPFGGVLPTLRQGLVEGRRIPEFSQDC 251
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
244  QSLRGKIEVDAAERLTLEHIOKTIWYIGKNEPEP---EPIPRKQVIRSLPSLEDIDP 300
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
252  ETLIRRLVVDPAKITIQAIRGRHW---QADPTLLQDDPAFMSQGYTSLGDPYNE 306
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
301  DYLDNSHSLGCFDRANKLQDLSEENQEKTIYELLDR---KERYPSQEDDLPFR 355
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
307  QVLGIMQALGI--DRQRTVESLQNSYNHFAIYILLERLRHRSIQPSRAATPAFAQ 364
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
356  -----NET---DPEKRYVSPM-----LNHGRKRP----- 378
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
365  POLRNSLSLSEVQELIPCDPFRPSLLCPQALASVYQALIDCDLHSLQLPFRPLD 424
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
425  TNCGVEFRHSISFSSLDLTAISEARQGPSLEEGVQEPPLPGSTGRHTTLAEVSTHFS 484
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
424  PLSGPRVTPHSPRGSLPTPKGR---VHTPKESPAG---TPNTPSPSPVVG 472
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
485  PLNPFCTIVSSSAVSP---SEGTSSDCLPFSSEGPAGLGGGLATPGLTGISSP--- 537
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
473  VPMWRNLINIKNSFLSGSPRFRRLQVPTPEMSN-----LTPESPSP----- 515
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
538  -----VRLAS---PLTGS-----QSATPVLQGAQAGATVLPVPSVFGGRASDTSLT 582
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
516  -----LAKSNFNGFISLEKEBQIFVYIKKPLSSIKADIVAHFLIPSLSHYIS 566
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
583  QGLKAFQQLRKNAKRTYGFGLNK-----IKGLAROV-C 615
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
567  QTSFRAEYKATGDAVFQKP 586
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
616  QSSIRG---SRGGMSTHTP 632
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

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```

RESULT 12
US-08-817-832B-31
; Sequence 31, Application US/08817832B
; Patent No. 6576681
; GENERAL INFORMATION:
; APPLICANT: MANDELKOW, Eckhard, et al.
; TITLE OF INVENTION: No. 6579691e1 Protein Kinase (NPK-110)
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
; STREET: 233 S. Wacker Drive, 6300 Sears Tower
; CITY: Chicago
; STATE: Illinois
; COUNTRY: US
; ZIP: 60606-6402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/817,832B
; FILING DATE: 28-APR-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/EP95/04258
; FILING DATE: 30-OCT-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: EP 94 11 7122.5
; FILING DATE: 28-OCT-1994
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 779 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-817-832B-31

Query Match          21.4%; Score 749; DB 4; Length 779;
Best Local Similarity 32.4%; Pred. No. 2.3e-47;
Matches 192; Conservative 94; Mismatches 186; Indels 120; Gaps 15;

15  YGPRLEKTLGKGTGLVKGVCVTCCKVAIKVNEKLSSEVIMKVEEIAIKLIE 74
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
42  HGNTRLOKTIKGNPAKVKLARHVLTRGVAVKIIDKIQLNPTSLQKLFRRVRLMKLIN 101
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
75  HPHVTKLDHYENKKYLYLVLEHVSQGELEFDYLVKKGRITPEAKRFRQIISALDFCHS 134
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
102  HNNIVLFEVIEETKTLVYVMEYASGGEVFDLVHGHMKKEKAKFRQIVSAVOYCHO 161
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
135  HSICRDLKRENILDEKKNIRIADFGMAASLOVGSLLFTSCGSPHYACEVIRGEKYDG 194
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
162  KCIIVHDLAENMLLDADNNIKIADFGFSNEFTVANKLDTFGSPHYAPELLFGAKYIDG 221
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
195  RZADWVSCGVILFALLVGALEPDDNLRQLLEK-VKRGVFHNPPIPPDCQSLRGMTVEV 253
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
222  PEVDWWSLGVILYLVSGSLPFDGQNLKELRERSCLRGKRVYFPWSTDCETLAKLVL 281
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
254  DAARLTLEHIOKTIWYIGKNEPEPQPIPRKQVIRSLPSLEDIDPVLDSHSLGGR 313
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
282  NPIKGSLEQIKDKMNVNGHEEB-----LKPYSPELIDNDAKRIDIVTMGFAR 333
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
314  DENKLLQDLSEENQEKTIYELLDRK----- 341
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
334  DE---INDALVSQKXDEVATYIILGRKPRPEHSGESLSSGNLCQSRSPSSDLNASTIQS 390
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
342  -----ERYPSQEDDLP-----RNEIDPPRKV-DSPMLNRKYG 375
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
391  PAHLKQRTISANOKORRFSHAGPSIDPAVSYTRPOANSYESQKEBWDKTAARRIGS 450
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
376  RR-----PERKSMVEV--LSVTGSGSPVPARAI-----EMAHGGRS 410
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

```

```

Db      451 TTGSKSEVTASPLVGDGRKSSAGPSNNVYSGSMTTRNTTYCERSTRIYALQNGRS 510
Qy      411 RSISGSSGSLSTS-----PLSPRVTPHPSPRSP-----LPTPK-GRVHTPKESPA 457
Db      511 SLIEMSSASSMSTGTSVTSAGSPAPRPHQKSMSTSGHPIKVTLPITKDSSEAYRP----- 565
Qy      458 GTNPTPTPSSPSVGV---PWRARL---NSIKNSLGSRRFRRLQVPTP 502
Db      566 GTAGRVAPASPSAHISASTPDRTPFRPGSSSRSTHGEQLRERRSAAYSGP 617

```

## RESULT 13

```

; Sequence 5, Application US/09799875
; Patent No. 6638721
; GENERAL INFORMATION:
; APPLICANT: Meyers, Rachel
; APPLICANT: Kapeller-Libermann, Rosara
; APPLICANT: Williams, Mark
; TITLE OF INVENTION: No. 6638721el Human Protein Kinases and Uses
; TITLE OF INVENTION: Therefor
; FILE REFERENCE: 35800/209996
; CURRENT APPLICATION NUMBER: US/09/799,875
; PRIOR FILING DATE: 2001-03-06
; PRIOR APPLICATION NUMBER: 60/182,059
; PRIOR FILING DATE: 2000-02-11
; PRIOR APPLICATION NUMBER: 09/659,287
; PRIOR FILING DATE: 2000-09-12
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 1203
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-799-875-5

```

```

Query Match      21.2%; Score 740; DB 4; Length 1203;
Best Local Similarity 34.2%; Pred. No. 1.9e-46;
Matches 189; Conservative 90; Mismatches 162; Indels 112; Gaps 16;

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```

Qy      16 VGPRLKRTLGKGTGLVKGVCVTCQKVAIKIVREKLSSEVLMKVEREILKILIEH 75
Db      5 IGYEIDRTIGKGFVAVKRAHLVYAKVAIKIIDTQDLENLKKIFREVIIMKMLCH 64
Qy      76 PHLVLTADVYENKLYLVLEHVSQGLFDYLVKGRLLTPKARKFFRQIISALDFCHS 135
Db      65 PHIRLVQVWETEMITLVTEYASGGEIFDLVHAGMAEKARKEKQIVTAVYFCHGR 124
Qy      136 SICRDLKPEYLLDDEKNRIADFGMASIQVGDLSLETSCGSPHYACPEVINGEKYDGR 195
Db      125 NIVHRDKAENMLLDANINIKIADFGFSNLFTPGQLKTCWGSPPYAAPLFEKKEYDGP 184
Qy      196 KADVWSCGVILFALLVGLPDDDNLRQLLEKVKRGVFMHPHPIPPDCOSILRGMTLEVA 255
Db      185 KVDIWSLGVYLVVCGALPDDSTLQNLKARVLSGKFRFPFMSTECHELINMLVLDP 244
Qy      256 ARRLTLEHIOGHIMYIGKNEPEPEQPIPRKQVIRSLPSLEIDIDPVLYDSVMSLSCFRDR 315
Db      245 NKRLSMEQICGKMMKLGADADPNFRLIACQQLKERRQVDPPLNEDVILAMEDMGL--DX 302
Qy      316 NKILQ-----DILS-----EENOEKMIYFLLDR- 340
Db      303 EQTLQAEQAGTANMISVQVQLINPENQIVPEPDGTLMLDSDGGEPSPEALVYLSMKRH 362
Qy      341 -----KERYSQED--EDLPRNEIDP--PRKRYDS-----PVLNHGKRRPERKS 382
Db      363 TVGAADRTEVMEQKLILPGFPGVAPQAPFLQVAPVNVFMHNLIPQNIQPTGOLEYKE 422
Qy      383 MEV-----LSVTGSGSVPARALEMAHQHGRSSISGASSGLSTSPRTYTPHPSRP 437
Db      423 QSLQPTLQILNMGFL-GRRA-----SDGANTQLHAQQLK-----RPR 463

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Qy      438 G-SPLPT-----PKGTPEVHTPKESPACTP-----NPT-----PPS 466
Db      464 GPSPDLMTTAVPAPVATVY--DESSDGEPPQEAQRYLANRSKRLTAMNPTAAEIPDL 521
Qy      467 SPVSGVPPWRARL 479
Db      522 QRLGQQPFRRSRV 534

```

## RESULT 14

```

; Sequence 40, Application US/08557006C
; Patent No. 6258547
; GENERAL INFORMATION:
; APPLICANT: Beri, Rajinder K.
; APPLICANT: Carling, David
; APPLICANT: Forder, Robert A.
; TITLE OF INVENTION: NUCLEIC ACID ENCODING AMP-ACTIVATED PROTEIN KINASE
; FILE REFERENCE: NGAP/PHM37588/UST
; CURRENT APPLICATION NUMBER: US/08/557,006C
; PRIOR FILING DATE: 1996-03-06
; PRIOR APPLICATION NUMBER: PCT/GB94/01093
; PRIOR FILING DATE: 1994-05-20
; PRIOR APPLICATION NUMBER: GB 9310489.1
; PRIOR FILING DATE: 1993-05-21
; PRIOR APPLICATION NUMBER: GB 9318010.7
; PRIOR FILING DATE: 1993-08-31
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 40
; LENGTH: 552
; TYPE: PRT
; ORGANISM: Rat
; FEATURE:
; NAME/KEY: gene
; LOCATION: (1)..(1747)
; OTHER INFORMATION: Full length cDNA sequence fragment of Human AMPK -
; OTHER INFORMATION: fragment begins at nucleotide 24 and ends with
; OTHER INFORMATION: nucleotide 1765
; US-08-557-006C-40

```

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Query Match      20.9%; Score 729.5; DB 3; Length 552;
Best Local Similarity 29.8%; Pred. No. 4e-46;
Matches 197; Conservative 103; Mismatches 217; Indels 143; Gaps 22;

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Qy      16 VGPRLKRTLGKGTGLVKGVCVTCQKVAIKIVREKLSSEVLMKVEREILKILIEH 74
Db      13 IGHVLTGTLTGVGTFGRKXIGEHQLTGHKVAVKILNQKIRSLDVVGKIKREIQNLKLF 72
Qy      75 PHLVLTADVYENKLYLVLEHVSQGLFDYLVKGRLLTPKARKFFRQIISALDFCHS 134
Db      73 HPHIILYQVISTPDPFMWMEYVSGGELFPIYIGHGRVVEVARRLFQQLLSAVDYCH 132
Qy      135 HSICRDLKPEYLLDDEKNRIADFGMASIQVGDLSLETSCGSPHYACPEVINGEKYDGR 194
Db      133 HNVVVRDLKPNVLLDQMNAKIADFGISNMKSDGEFLRTSCGSPNYAAPEVLSGRYAG 192
Qy      195 KADVWSCGVILFALLVGLPDDDNLRQLLEKVKRGVFMHPHPIPPDCOSILRGMTLEVA 254
Db      193 PEVDIWSGVILVALLCTLPDDSHVPTLPFKIRGVFYIPEYLINSIATILMHMLQVD 252
Qy      255 AARRLTLEHIOGHIMYIGKNEPEPEQPIPRKQVIRSLPSLEIDIDPVLYDSVMSLSCFRDR 315
Db      253 PLKRTIIDIHREHMF-----KQDLPSYL-----FPEDPSYDAVIDEAVKEVCEK 299
Qy      309 LCGFDRNKLQDLIS--EENOEKMIYFLLDRKERYPSQED-----DLPRNEIDPARK 363
Db      300 FEC--TSEVWNSLYSGPQDLVAAYHLIDNR-RIMNQSEFYTLASSPFTG----- 349
Qy      364 RVDSEMLNRHGKRRPERKSMELSVTDGSGSVPARARLEMAHQHGRSSISGASSGLSTS 423
Db      350 -----SFMQ-----DVAMH----- 358

```

```

QY 424 PLSPRTVPHSPRGSPL--PTPKGVHTHPKSPAGTPTPTSPSPSGVGVPMRRLNS 481
Db 359 --IPGKAPRDE-MPPLIADSPFA-----RCPDLANTTPKSLAVKAKMHLGINS 408
QY 482 IKNSFLSPSPRHRKLQVPTPEMSNL---TPSSPELAKKSMFGNFISEKEEIOIFVY 537
Db 409 QSKPYDIMAENVYRMRKQLDPEWKKVNAVYHLRVRRKNPVT-----GNVYVMSL--QLYLY 460
QY 538 IKKPKSLSTKADIVHAALSTPSLSHSVTSQTSFPAEKATGAPAVQKPKFQVDITYTE 597
Db 461 -----DKRSYLLDFKSIDDEVYEQRSSTPQRSASAGLHRP-RSSVDSSTAE 508
QY 598 GGEAKENGIVYVFTLLSGPSRRFRKVEVETIOQLSTDPDPAQHLSPTTN-CMEMAT 656
Db 509 NHS-----LSG-----SLTGSITGSLTSSASPRLGSHITMDPFEMCASLIT 548

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RESULT 15
US-08-557-006C-43
; Sequence 43, Application US/08557006C
; Patent No. 6258547
; GENERAL INFORMATION:
; APPLICANT: Bert, Rajindar K.
; APPLICANT: Carling, David
; APPLICANT: Forster, Robert A.
; TITLE OF INVENTION: NUCLEIC ACID ENCODING AMP-ACTIVATED PROTEIN KINASE
; FILE REFERENCE: NGAP/PH37588/UST
; CURRENT APPLICATION NUMBER: US/08/557, 006C
; PRIOR FILING DATE: 1996-03-06
; PRIOR APPLICATION NUMBER: PCT/GB94/01093
; PRIOR FILING DATE: 1994-05-20
; PRIOR APPLICATION NUMBER: GB 9310489.1
; PRIOR FILING DATE: 1993-05-21
; PRIOR APPLICATION NUMBER: GB 9318010.7
; PRIOR FILING DATE: 1993-08-31
; NUMBER OF SEQ. ID NOS: 44
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 43
; LENGTH: 633
; TYPE: PRT
; ORGANISM: Yeast
; FEATURE:
; NAME/KEY: PEPTIDE
; LOCATION: (1)..(633)
; OTHER INFORMATION: Yeast SNF1 polypeptide
US-08-557-006C-43

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Query Match          20.6%; Score 720.5; DB 3; Length 633;
Best Local Similarity 33.6%; Pred. No. 2.3e-45;
Matches 158; Conservative 109; Mismatches 152; Indels 51; Gaps 11;

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QY 15 YGPEYLEKTLGKQGTGLVKGVCVTCQGVAKIVNREKLSSEVLM-KVEREIALIKLI 73
Db 51 HIGVQIVKTLGGSGFGKVLAVHTTGGVALKIINKKVLAKSDMGRIERISYLRLL 110
QY 74 EHHVTLKLVHYENKKTLYLVLEHVSGLFEDLYAKKGRITPKARKFPQIISALDFQH 133
Db 111 RHPHIITLVYVSKSKEIINWIEY-AGNELFDYIVQDKMSSEQEARFQOIISAVEYCH 169
QY 134 SHSICHRDLKPENLILDEKNINRIADFGMASLQVGSILLETSGSPHYACPEVIREKXD 193
Db 170 RHKIVHRDLKPENLILDEHNVKIDFGLSNIMTDGNFLKTSQSPHYAAPFVIGSKLYA 229
QY 194 GRKADVWSCGVIIIFALLVGLPDDDNLRQLLEKVRGVFHMPHFIIPDQCSTLRGMIEY 253
Db 230 GPEVDVWSCGVIIYVMLCRLLPDDDSIPVLFKNISNGVYTLPLKPLSPGAAGLIKRLIV 289
QY 254 DAARLTLLEHIQKIWIYIG-----KNEPEPEQPIPRKVOIRSLPSLEDIDPDVL 303
Db 290 NPLNRSIHETIMQDDMKVLDPEYLLPDLKPRPEENENNDKSGSSPDNDIDNDLV 349
QY 304 DSMHSIAGCFPRDKLLODDLSEEE---NOEKMIYFLLDRKERYPSQE---DEDLPP 354

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```

Db 350 NILSTMGV-EKDEIYESLESEEDTFAFNEIRDAVMILKENKSLIKMKANKSVSDELDI 408
QY 355 RNEIDP-----RRYVDSFMLNHRKRRPRKSMEVLSVTDGSPVPARRALEMA 404
Db 409 FLSQSPPTFOQSKSHOKSCVDHETAKQHARRM-----ASAITQQRTHQS 454
QY 405 QHGQRSRISGASGSLTSPSSPRV-TPHSPRGSPLPTPKGVHTPK 453
Db 455 PMDQYKE---EDSTVSLPTSLPQIRANMLAQSSPAAS-KISPLVTKK 500

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Search completed: July 29, 2004, 10:27:22
Job time : 22 secs

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GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: July 29, 2004, 10:25:56 ; Search time 50 Seconds

(without alignments)  
4190.804 Million cell updates/sec

Title: US-10-054-579-2

Perfect score: 3497

Sequence: 1 MSTGKGGAQHAQYVGPYR.....TNCMEMTGRSLKCGIIPKS 668

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1291235 seqs, 313682936 residues

Total number of hits satisfying chosen parameters: 1291235

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :  
1: /published/Applications/AA:\*  
2: /cgn2\_6/prodata/2/pubppa/US07\_PUBCOMB.pep:\*  
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18: /cgn2\_6/prodata/2/pubppa/US60\_PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	3497	100.0	668	US-10-054-579-2	Sequence 2, Appli
2	3497	100.0	668	US-10-195-072-2	Sequence 2, Appli
3	3497	100.0	668	US-10-195-071-2	Sequence 2, Appli
4	3423	97.9	664	US-10-362-892-18	Sequence 18, Appli
5	3423	97.9	664	US-10-288-798-18	Sequence 18, Appli
6	3380	96.7	674	US-10-283-247-2	Sequence 2, Appli
7	3374	96.5	674	US-09-842-582-2	Sequence 2, Appli
8	3374	96.5	674	US-10-283-247-7	Sequence 7, Appli
9	3374	96.5	674	US-10-283-247-8	Sequence 8, Appli
10	3200	91.5	688	US-10-425-114-54467	Sequence 54467, A
11	3188	91.2	608	US-10-054-579-4	Sequence 4, Appli
12	3065	87.6	614	US-10-283-247-10	Sequence 9, Appli
13	3065	87.6	614	US-10-283-247-10	Sequence 10, Appli
14	3050	87.2	636	US-10-283-247-5	Sequence 5, Appli
15	3028	86.6	585	US-10-195-072-4	Sequence 4, Appli

16	3028	86.6	585	14	US-10-195-071-4	Sequence 4, Appli
17	3015	86.2	603	14	US-10-195-072-17	Sequence 17, Appli
18	3015	86.2	603	14	US-10-195-071-17	Sequence 17, Appli
19	2799	80.0	778	12	US-10-423-543-11	Sequence 11, Appli
20	2799	80.0	778	14	US-10-354-358-92	Sequence 92, Appli
21	2799	80.0	778	14	US-10-116-326-2	Sequence 2, Appli
22	2785.5	79.7	703	14	US-10-311-034-17	Sequence 1, Appli
23	2545.5	72.8	703	14	US-10-116-326-6	Sequence 6, Appli
24	2386.5	68.2	762	12	US-10-116-326-4	Sequence 4, Appli
25	1537.5	44.0	506	12	US-10-425-114-54189	Sequence 54189, A
26	1275.5	36.5	301	12	US-10-276-774-1422	Sequence 1422, Ap
27	871.5	24.9	1349	16	US-10-618-581-16	Sequence 16, Appl
28	796.5	22.8	745	12	US-10-260-708-79	Sequence 79, Appl
29	796.5	22.8	745	14	US-10-151-101-36	Sequence 36, Appl
30	796.5	22.8	745	14	US-10-161-565-94	Sequence 24, Appl
31	794.5	22.7	691	9	US-09-919-585-9	Sequence 6, Appli
32	794.5	22.7	724	15	US-09-919-585-9	Sequence 9, Appli
33	793.5	22.7	724	15	US-10-274-194-2	Sequence 2, Appli
34	793.5	22.7	724	16	US-10-760-407-2	Sequence 2, Appli
35	793.5	22.7	1462	16	US-10-618-581-15	Sequence 15, Appl
36	792.5	22.7	722	15	US-10-274-194-4	Sequence 4, Appli
37	792.5	22.7	722	16	US-10-760-407-4	Sequence 4, Appli
38	790.5	22.6	514	12	US-10-183-687-248	Sequence 248, App
39	790.5	22.6	722	8	US-08-817-8328-32	Sequence 32, Appl
40	790.5	22.6	722	12	US-10-440-435-32	Sequence 32, Appl
41	790	22.6	1518	9	US-09-801-368-152	Sequence 152, App
42	790	22.6	1518	15	US-10-369-993-22243	Sequence 22243, A
43	790	22.6	1518	16	US-10-618-581-11	Sequence 11, Appl
44	788	22.5	769	12	US-10-363-616-403	Sequence 403, App
45	787	22.5	545	12	US-10-425-114-62429	Sequence 62429, A

## ALIGNMENTS

RESULT 1									
US-10-054-579-2									
; Sequence 2, Application US/10054579									
; Publication No. US20020137913A1									
; GENERAL INFORMATION:									
; APPLICANT: Turner, C. Alexander Jr.									
; APPLICANT: Mathur, Brian									
; TITLE OF INVENTION: No. US20020137913A1 Human Kinases and Polynucleotides Encoding									
; FILE REFERENCE: LEX-0300-USA									
; CURRENT APPLICATION NUMBER: US/10/054,579									
; CURRENT FILING DATE: 2002-01-22									
; PRIOR APPLICATION NUMBER: US 607263,378									
; PRIOR FILING DATE: 2001-01-23									
; NUMBER OF SEQ ID NOS: 4									
; SOFTWARE: FastSeq for Windows Version 4.0									
; SEQ ID NO 2									
; LENGTH: 668									
; TYPE: PRT									
; ORGANISM: homo sapiens									
US-10-054-579-2									
Query Match									
Best Local Similarity 100.0%; Score 3497; DB 13; Length 668;									
Matches 668; Conservative 0; Mismatches 0; Indels 0; Gaps 0;									
QY	1	MSTGKGGAQHAQYVGPYRLEKTKGKQGTGVLGVHVCVTCOKAIVREKISEVL	60						
DB	1	MSTGKGGAQHAQYVGPYRLEKTKGKQGTGVLGVHVCVTCOKAIVREKISEVL	60						
QY	61	MVEREIALTKIEHPYLKLDVYENKKYLYLVLEHSGSELPDYLVKGRLEPKARK	120						
DB	61	MVEREIALTKIEHPYLKLDVYENKKYLYLVLEHSGSELPDYLVKGRLEPKARK	120						
QY	121	FRQIISALDFCHSISICRDLKPNLLIDKNNIRIDFGMASIQVGDLSLETSCGSPH	180						
DB	121	FRQIISALDFCHSISICRDLKPNLLIDKNNIRIDFGMASIQVGDLSLETSCGSPH	180						
QY	181	YACPEVIREKXDKKADVWSCGVLFPALVGLPFDNDNLRLLEKVKRGVFMHPFLP	240						

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Db      181 YACEVIRGEKXDKGRKADVWSCGVIPLFALLVGLPFDNDNLRLLEKVRKGVFHMHPFIIP 240
Qy      241 PDCOSLRGMIEVDAAARLTLEHIQKHIWYIGKNEPEPEOPIPRKVOIRSLPSLEIDIP 300
Db      241 PDCOSLRGMIEVDAAARLTLEHIQKHIWYIGKNEPEPEOPIPRKVOIRSLPSLEIDIP 300
Qy      301 DVLDSMSLGCFFRDNKLLQDLSEENOEKMIYFLLDKERYPSQEDDLPPRNEIDP 360
Db      301 DVLDSMSLGCFFRDNKLLQDLSEENOEKMIYFLLDKERYPSQEDDLPPRNEIDP 360
Qy      361 PRKRVDSFMLNRHGRKRRPERKSMELSVTDGGSFVPARRAIEMAOHQORSRISIGASSGL 420
Db      361 PRKRVDSFMLNRHGRKRRPERKSMELSVTDGGSFVPARRAIEMAOHQORSRISIGASSGL 420
Qy      421 STSPSSPRVTPHPSPPGSPPLPTPKGTPVHTPKESPAGTNPPTPPSSPSVGGVPMWRRLN 480
Db      421 STSPSSPRVTPHPSPPGSPPLPTPKGTPVHTPKESPAGTNPPTPPSSPSVGGVPMWRRLN 480
Qy      481 SIXKSLFGSPFRHRRKLOVPTPEMSNLTPESSPELAKKSMFGNFIISLEKEEQIFVVIKD 540
Db      481 SIXKSLFGSPFRHRRKLOVPTPEMSNLTPESSPELAKKSMFGNFIISLEKEEQIFVVIKD 540
Qy      541 KPSSIRKADIVHAFLSLPSLSHSVISOFSRAEYKATGPAVFOKPVKFOVDITYEGGE 600
Db      541 KPSSIRKADIVHAFLSLPSLSHSVISOFSRAEYKATGPAVFOKPVKFOVDITYEGGE 600
Qy      601 AQKNGIYSVTFTLLSGPSRRFRKRVETIQAOILSTHDPRAOHLSDTTNOMEMMTGRSL 660
Db      601 AQKNGIYSVTFTLLSGPSRRFRKRVETIQAOILSTHDPRAOHLSDTTNOMEMMTGRSL 660
Qy      661 KCGIIPKS 668
Db      661 KCGIIPKS 668

RESULT 2
US-10-195-072-2
; Sequence 2, Application US/10195072
; Publication No. US20030092036A1
; GENERAL INFORMATION:
; APPLICANT: Origene Technologies
; TITLE OF INVENTION: Full-Length Serine Protein Kinase in Brain and Pancreas
; FILE REFERENCE: 16U 101 C2
; CURRENT APPLICATION NUMBER: US/10/195, 072
; CURRENT FILING DATE: 2002-07-15
; PRIOR APPLICATION NUMBER: US 09/930,181
; PRIOR FILING DATE: 2001-08-16
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 668
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-195-072-2

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Query Match      100.0%; Score 3497; DB 14; Length 668;
Best Local Similarity 100.0%; Pred. No. 8,6e-218;
Matches 668; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 MTSTGKDGAGAHQYVGPYRLEKTLGKQGTGLVGLGVHCVTCQKVAIKIVNREKLSBSYL 60
Db      1 MTSTGKDGAGAHQYVGPYRLEKTLGKQGTGLVGLGVHCVTCQKVAIKIVNREKLSBSYL 60
Qy      61 MKVEREIAILKLIIEHPVHLKLDHYENKKYLYLVLEHVSGGELPDYLVKGRLLTPKEARK 120
Db      61 MKVEREIAILKLIIEHPVHLKLDHYENKKYLYLVLEHVSGGELPDYLVKGRLLTPKEARK 120
Qy      121 FFRQIISALDFCHSHSICHRDLKPENLIDDKNNIRIADFGMASLQVDSILFETSCGSPH 180
Db      121 FFRQIISALDFCHSHSICHRDLKPENLIDDKNNIRIADFGMASLQVDSILFETSCGSPH 180
Qy      181 YACEVIRGEKXDKGRKADVWSCGVIPLFALLVGLPFDNDNLRLLEKVRKGVFHMHPFIIP 240

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Db      181 YACEVIRGEKXDKGRKADVWSCGVIPLFALLVGLPFDNDNLRLLEKVRKGVFHMHPFIIP 240
Qy      241 PDCOSLRGMIEVDAAARLTLEHIQKHIWYIGKNEPEPEOPIPRKVOIRSLPSLEIDIP 300
Db      241 PDCOSLRGMIEVDAAARLTLEHIQKHIWYIGKNEPEPEOPIPRKVOIRSLPSLEIDIP 300
Qy      301 DVLDSMSLGCFFRDNKLLQDLSEENOEKMIYFLLDKERYPSQEDDLPPRNEIDP 360
Db      301 DVLDSMSLGCFFRDNKLLQDLSEENOEKMIYFLLDKERYPSQEDDLPPRNEIDP 360
Qy      361 PRKRVDSFMLNRHGRKRRPERKSMELSVTDGGSFVPARRAIEMAOHQORSRISIGASSGL 420
Db      361 PRKRVDSFMLNRHGRKRRPERKSMELSVTDGGSFVPARRAIEMAOHQORSRISIGASSGL 420
Qy      421 STSPSSPRVTPHPSPPGSPPLPTPKGTPVHTPKESPAGTNPPTPPSSPSVGGVPMWRRLN 480
Db      421 STSPSSPRVTPHPSPPGSPPLPTPKGTPVHTPKESPAGTNPPTPPSSPSVGGVPMWRRLN 480
Qy      481 SIXKSLFGSPFRHRRKLOVPTPEMSNLTPESSPELAKKSMFGNFIISLEKEEQIFVVIKD 540
Db      481 SIXKSLFGSPFRHRRKLOVPTPEMSNLTPESSPELAKKSMFGNFIISLEKEEQIFVVIKD 540
Qy      541 KPSSIRKADIVHAFLSLPSLSHSVISOFSRAEYKATGPAVFOKPVKFOVDITYEGGE 600
Db      541 KPSSIRKADIVHAFLSLPSLSHSVISOFSRAEYKATGPAVFOKPVKFOVDITYEGGE 600
Qy      601 AQKNGIYSVTFTLLSGPSRRFRKRVETIQAOILSTHDPRAOHLSDTTNOMEMMTGRSL 660
Db      601 AQKNGIYSVTFTLLSGPSRRFRKRVETIQAOILSTHDPRAOHLSDTTNOMEMMTGRSL 660
Qy      661 KCGIIPKS 668
Db      661 KCGIIPKS 668

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RESULT 3
US-10-195-071-2
; Sequence 2, Application US/10195071
; Publication No. US20030096271A1
; GENERAL INFORMATION:
; APPLICANT: Origene Technologies
; TITLE OF INVENTION: Full-Length Serine Protein Kinase in Brain and Pancreas
; FILE REFERENCE: 16U 101 C1
; CURRENT APPLICATION NUMBER: US/10/195, 071
; CURRENT FILING DATE: 2002-07-15
; PRIOR APPLICATION NUMBER: US 09/930,181
; PRIOR FILING DATE: 2001-08-16
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 668
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-195-071-2

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Query Match      100.0%; Score 3497; DB 14; Length 668;
Best Local Similarity 100.0%; Pred. No. 8,6e-218;
Matches 668; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 MTSTGKDGAGAHQYVGPYRLEKTLGKQGTGLVGLGVHCVTCQKVAIKIVNREKLSBSYL 60
Db      1 MTSTGKDGAGAHQYVGPYRLEKTLGKQGTGLVGLGVHCVTCQKVAIKIVNREKLSBSYL 60
Qy      61 MKVEREIAILKLIIEHPVHLKLDHYENKKYLYLVLEHVSGGELPDYLVKGRLLTPKEARK 120
Db      61 MKVEREIAILKLIIEHPVHLKLDHYENKKYLYLVLEHVSGGELPDYLVKGRLLTPKEARK 120
Qy      121 FFRQIISALDFCHSHSICHRDLKPENLIDDKNNIRIADFGMASLQVDSILFETSCGSPH 180
Db      121 FFRQIISALDFCHSHSICHRDLKPENLIDDKNNIRIADFGMASLQVDSILFETSCGSPH 180
Qy      181 YACEVIRGEKXDKGRKADVWSCGVIPLFALLVGLPFDNDNLRLLEKVRKGVFHMHPFIIP 240

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Db 181 YACEVIRGERTDGRKADWMSGVITLALVGLALPPDDDLRLLEKVGVMHMFIP 240
QY 241 PDCGSLRGMLVDAARLTLEHIQKAIWIYIGKNEPEPOPIPRKQVIRSLPSLEDIDP 300
Db 241 PDCGSLRGMLVDAARLTLEHIQKAIWIYIGKNEPEPOPIPRKQVIRSLPSLEDIDP 300
QY 301 DVLDMSHSLGCFRPNKLLQDLSEENQKMIYFLLDKRERPSQEDDLPRNEDIP 360
Db 301 DVLDMSHSLGCFRPNKLLQDLSEENQKMIYFLLDKRERPSQEDDLPRNEDIP 360
QY 361 PRKAVDSPMLNRHGRKRRPERKSMVSLVTDGSGFVPARRAIEWAHQGRSRISGASGL 420
Db 361 PRKAVDSPMLNRHGRKRRPERKSMVSLVTDGSGFVPARRAIEWAHQGRSRISGASGL 420
QY 421 STSLSPRYTPHSPGSPPLPTPKTPTVHTPKESPAKTNPPTPSSPSVGVPMARLN 480
Db 421 STSLSPRYTPHSPGSPPLPTPKTPTVHTPKESPAKTNPPTPSSPSVGVPMARLN 480
QY 481 SIKSFIQSPFHRKLOVPTPEMSNLTPSSPELAKSMFGNFIKLEKEQIFVYIKD 540
Db 481 SIKSFIQSPFHRKLOVPTPEMSNLTPSSPELAKSMFGNFIKLEKEQIFVYIKD 540
QY 541 KPLSSIKADIYHAFSLPSLSHVSISQTSFPAEYKATGPAVFOKPYKFOVDITTYEGE 600
Db 541 KPLSSIKADIYHAFSLPSLSHVSISQTSFPAEYKATGPAVFOKPYKFOVDITTYEGE 600
QY 601 AOKNGIYSVTFLLSGPSRRFKRVETIQALISTHDPAAQHLSDTTNCEMNTGRSL 660
Db 601 AOKNGIYSVTFLLSGPSRRFKRVETIQALISTHDPAAQHLSDTTNCEMNTGRSL 660
QY 661 KCGIIPKS 668
Db 661 KCGIIPKS 668

RESULT 4
US-10-362-892-18
; Sequence 18, Application US/10362892
; Publication No. US20040038881A1
; GENERAL INFORMATION:
; APPLICANT: INCYTE GENOMICS, INC.; BANDMAN, Olga
; APPLICANT: NGUYEN, Daniel B.; WALIA, Narinder K.
; APPLICANT: HAFALIA, April J.A.; YAO, Montique G.
; APPLICANT: GANDHI, Ameena R.; GURURAJAN, Rajagopal
; APPLICANT: DING, Li; PATTERSON, Chandra S.
; APPLICANT: YUE, Henry; BAUGHN, Mariah R.
; APPLICANT: TRIBOULEY, Catherine M.; THORNTON, Michael B.
; APPLICANT: ELLIOTT, Vicki S.; LU, Yan
; APPLICANT: ISON, Craig H.; AU-YOUNG, Janice K.
; APPLICANT: TANG, Y. Tom; AZIMZAI, Yalda
; APPLICANT: BURRILL, John D.; MARCUS, Gregory A.
; APPLICANT: ZINGLER, Kurt A.; LU, Dyung Aina M.
; APPLICANT: LAL, Preeti G.; RAMKUMAR, Jayalaxmi
; APPLICANT: WARREN, Bridget A.; KEARNEY, Liam
; APPLICANT: POLICKY, Jennifer L.; THANAGAVELU, Kavitha
; APPLICANT: BURFORD, Neil
; TITLE OF INVENTION: HUMAN KINASES
; FILE REFERENCE: PF-0209 USN
; CURRENT APPLICATION NUMBER: US/10/362,892
; PRIOR FILING DATE: 2003-02-25
; PRIOR APPLICATION NUMBER: PCT/US01/27219
; PRIOR FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: US 60/229,873
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: US 60/231,357
; PRIOR FILING DATE: 2000-09-08
; PRIOR APPLICATION NUMBER: US 60/232,654
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: US 60/234,902
; PRIOR FILING DATE: 2000-09-22
; PRIOR APPLICATION NUMBER: US 60/236,499
; PRIOR FILING DATE: 2000-09-29

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; PRIOR APPLICATION NUMBER: US 60/238,389
; PRIOR FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: US 60/240,542
; PRIOR FILING DATE: 2000-10-13
; NUMBER OF SEQ ID NOS: 48
; SOFTWARE: PERL Program
; SEQ ID NO 18
; LENGTH: 664
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURES:
; NAME/KEY: misc.feature
; OTHER INFORMATION: Incyte ID No. US20040038881A1 4022651CD1
US-10-362-892-18

Query Match          97.9% Score 3423; DB 12; Length 664;
Best Local Similarity 100.0%; Pred. No. 5.2e-213;
Matches 654; Conservative 0; Mismatches 0; Gaps 0;

QY 15 YGPRYRLKTLKRGQGTGLVKGHCVTGQKVAIKIYNREKLSSEVLMKVEREIALIKLIE 74
Db 11 YGPRYRLKTLKRGQGTGLVKGHCVTGQKVAIKIYNREKLSSEVLMKVEREIALIKLIE 70
QY 75 HPHVLTLDHYVANKKYLIVLEHYVGGRLFDVLYKKGLTPKEAKFPROIISALDFCHS 134
Db 71 HPHVLTLDHYVANKKYLIVLEHYVGGRLFDVLYKKGLTPKEAKFPROIISALDFCHS 130
QY 135 HSICRDLKPNLLDEKKNIRIADFGMASLQVGDLSLETSCGSPHYACPEVIRGEKYDG 194
Db 131 HSIHRDLKPNLLDEKKNIRIADFGMASLQVGDLSLETSCGSPHYACPEVIRGEKYDG 190
QY 195 RRADWMSGVIIIPALLVGLALPPDDNLRKLEKXKRGVFMHMFIPDCQSLRGILEVD 254
Db 191 RRADWMSGVIIIPALLVGLALPPDDNLRKLEKXKRGVFMHMFIPDCQSLRGILEVD 250
QY 255 AARLTLEHIQKAIWIYIGKNEPEPOPIPRKQVIRSLPSLEDIDPDKVDSFMLNRHG 314
Db 251 AARLTLEHIQKAIWIYIGKNEPEPOPIPRKQVIRSLPSLEDIDPDKVDSFMLNRHG 310
QY 315 RNKLLQDLSEENQKMIYFLLDKRERYPSQEDDLPRNEDIPPRKRVDSFMLNRHG 374
Db 311 RNKLLQDLSEENQKMIYFLLDKRERYPSQEDDLPRNEDIPPRKRVDSFMLNRHG 370
QY 375 KRRPEKSMVUSLYDGGSPVPARRAIEWAHQGRSRISGASGLSTSPSSRYTPHP 434
Db 371 KRRPEKSMVUSLYDGGSPVPARRAIEWAHQGRSRISGASGLSTSPSSRYTPHP 430
QY 435 SPRGSLPTPKGTPTVHTPKESPAKTNPPTPSSPSVGVPMARLNSIKNSFLGSPRFR 494
Db 431 SPRGSLPTPKGTPTVHTPKESPAKTNPPTPSSPSVGVPMARLNSIKNSFLGSPRFR 490
QY 495 RKIQVTPPEMSNLTPSSPELAKSMFGNFIKLEKEQIFVYIDKPLSSIKADIYHAF 554
Db 491 RKIQVTPPEMSNLTPSSPELAKSMFGNFIKLEKEQIFVYIDKPLSSIKADIYHAF 550
QY 555 LSIPLSHSVISQTSFPAEYKATGPAVFOKPYKFOVDITTYEGGAQKENGISVTFLL 614
Db 551 LSIPLSHSVISQTSFPAEYKATGPAVFOKPYKFOVDITTYEGGAQKENGISVTFLL 610
QY 615 LSGPSRRFKRVVETIQALISTHDPAAQHLSDTTNCEMNTGRSLKCGIIPKS 668
Db 611 LSGPSRRFKRVVETIQALISTHDPAAQHLSDTTNCEMNTGRSLKCGIIPKS 664

RESULT 5
US-10-288-798-18
; Sequence 18, Application US/10288798
; Publication No. US20030207299A1
; GENERAL INFORMATION:
; APPLICANT: BANDMAN, Olga; NGUYEN, Daniel B.
; APPLICANT: WALIA, Narinder K.; HAFALIA, April J.A.;
; APPLICANT: YAO, Montique G.; GANDHI, Ameena R.;
; APPLICANT: GURURAJAN, Rajagopal; DING, Li;

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; APPLICANT: PATTERSON, Chandra; YUE, Henry;
; APPLICANT: BAUGHN, Mariah R.; TRIBOULEY, Catherine M.;
; APPLICANT: THORNTON, Michael; ELIOTY, Vicki S.;
; APPLICANT: LU, Yan; ISON, Craig H.; Y. Tom;
; APPLICANT: AU-YOUNG, Janice; TRANG, Y. Tom;
; APPLICANT: AZIMZAI, Yalda; BURRILL, John D.;
; APPLICANT: MARCUS, Gregory A.; ZINGLER, Kurt A.;
; APPLICANT: LU, Dzung Anna M.; LAL, Preeti G.;
; APPLICANT: RAMKUMAR, Jayalakshi; WARREN, Bridget A.;
; APPLICANT: KEARNEY, Liam; POLICKY, Jennifer L.;
; APPLICANT: THANGAVEILU, Kavitha; BURFORD, Neil
; TITLE OF INVENTION: HUMAN KINASES
; FILE REFERENCE: PI-0209 USA
; CURRENT APPLICATION NUMBER: US/10/288,798
; PRIOR FILING DATE: 2002-11-01
; PRIOR APPLICATION NUMBER: PCT/US01/27219
; PRIOR FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: US 60/240,542
; PRIOR FILING DATE: 2000-10-13
; PRIOR APPLICATION NUMBER: US 60/238,389
; PRIOR FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: US 60/236,499
; PRIOR FILING DATE: 2000-09-29
; PRIOR APPLICATION NUMBER: US 60/234,902
; PRIOR FILING DATE: 2000-09-22
; PRIOR APPLICATION NUMBER: US 60/232,654
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: US 60/231,357
; PRIOR FILING DATE: 2000-09-08
; PRIOR APPLICATION NUMBER: US 60/229,873
; PRIOR FILING DATE: 2000-08-31
; NUMBER OF SEQ ID NOS: 48
; SOFTWARE: PERL Program
; SEQ ID NO 18
; LENGTH: 664
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20030207299A1 4022651CD1
US-10-288-798-18

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Query Match          97.9%; Score 3423; DB 15; Length 664;
Best Local Similarity 100.0%; Pred. No. 5,2e-213;
Matches 654; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 15 YVGPRLKLTGKQGTGLVKGVCVTCQKAIKIVNREKLSVLMKVEREIAILKLE 74
DB 11 YVGPRLKLTGKQGTGLVKGVCVTCQKAIKIVNREKLSVLMKVEREIAILKLE 70
QY 75 HPHVTKLHDVYENKKYLYLVLEHVSQGLFPDYLVKSGRLTPKXARKFPRQIISALDFCHS 134
DB 71 HPHVTKLHDVYENKKYLYLVLEHVSQGLFPDYLVKSGRLTPKXARKFPRQIISALDFCHS 130
QY 135 HSICHRDLKPENLIDDEKNIRIADFGMASIQVDSLSLETSCGSPHYACEVIRGEKYDG 194
DB 131 HSICHRDLKPENLIDDEKNIRIADFGMASIQVDSLSLETSCGSPHYACEVIRGEKYDG 190
QY 195 RKADVSGCVILFALVGLPDDDNIRQLLEKYGVEFMHPHPIPDCCSILRGMEYD 254
DB 191 RKADVSGCVILFALVGLPDDDNIRQLLEKYGVEFMHPHPIPDCCSILRGMEYD 250
QY 255 AARLTLEHIQKHIWYIGKNEPEEPIPRKVOIRSLPSLIEDIDPVLDSMHSIGCFRD 314
DB 251 AARLTLEHIQKHIWYIGKNEPEEPIPRKVOIRSLPSLIEDIDPVLDSMHSIGCFRD 310
QY 315 RNKLLODLISEENOEKMYIFLLIDRKERYPSODEDLPENNEIDPRKRYDSMLNRHG 374
DB 311 RNKLLODLISEENOEKMYIFLLIDRKERYPSODEDLPENNEIDPRKRYDSMLNRHG 370
QY 375 KRRPERKSMYLVSTDGSPVPARAIEMAHGGRSSISGASSGLSTSPSSRYTPAP 434
DB 371 KRRPERKSMYLVSTDGSPVPARAIEMAHGGRSSISGASSGLSTSPSSRYTPAP 430

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QY 435 SPRGSLPPTPKGTVPHTPKESPACTNPTPPSSPSVGVPMRARLINSIKNSPLGSPRHR 494
DB 431 SPRGSLPPTPKGTVPHTPKESPACTNPTPPSSPSVGVPMRARLINSIKNSPLGSPRHR 490
QY 495 RKLQVPTPEMNLTPESPPELAKSMFGNLSLEKEQIVVVKDKTSLSSIKADIVAF 554
DB 491 RKLQVPTPEMNLTPESPPELAKSMFGNLSLEKEQIVVVKDKTSLSSIKADIVAF 550
QY 555 LSIPSLSHSVISQTSFRAEYKATGGPAVFOKPVKQVDITYEGGEAKENGIVSVFTL 614
DB 551 LSIPSLSHSVISQTSFRAEYKATGGPAVFOKPVKQVDITYEGGEAKENGIVSVFTL 610
QY 615 LSGSRPRPRVETIQALLSTHDPRAOHSPTTNCMMNTGSLKCGIIPKS 668
DB 611 LSGSRPRPRVETIQALLSTHDPRAOHSPTTNCMMNTGSLKCGIIPKS 664

RESULT 6
US-10-283-247-2
; Sequence 2; Application US/10283247
; Publication No. US20030119037A1
; GENERAL INFORMATION:
; APPLICANT: NEELAM, Beena et al.
; TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
; TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: CLO01304
; CURRENT APPLICATION NUMBER: US/10/283,247
; CURRENT FILING DATE: 2002-10-30
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 674
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-283-247-2

Query Match          96.7%; Score 3380; DB 14; Length 674;
Best Local Similarity 99.8%; Pred. No. 3,2e-210;
Matches 646; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MTSKDGAGCAHQVYGYRLKLTGKQGTGLVKGVCVTCQKAIKIVNREKLSVLM 60
DB 1 MTSKDGAGCAHQVYGYRLKLTGKQGTGLVKGVCVTCQKAIKIVNREKLSVLM 60
QY 61 MVEREIAILKLEHHPHYKLDVYENKKYLYLVLEHVSQGLFPDYLVKSGRLTPKXARK 120
DB 61 MVEREIAILKLEHHPHYKLDVYENKKYLYLVLEHVSQGLFPDYLVKSGRLTPKXARK 120
QY 121 FPROIISALDFCHSHSICHRDLKPENLIDDEKNIRIADFGMASIQVDSLSLETSCGSPH 180
DB 121 FPROIISALDFCHSHSICHRDLKPENLIDDEKNIRIADFGMASIQVDSLSLETSCGSPH 180
QY 181 VACPEVIRGEKYDGKADVSGCVILFALVGLPDDDNIRQLLEKYGVEFMHPHPI 240
DB 181 VACPEVIRGEKYDGKADVSGCVILFALVGLPDDDNIRQLLEKYGVEFMHPHPI 240
QY 241 PDCOSILRGMEYDAAARLTLEHIQKHIWYIGKNEPEEPIPRKVOIRSLPSLIEDIDP 300
DB 241 PDCOSILRGMEYDAAARLTLEHIQKHIWYIGKNEPEEPIPRKVOIRSLPSLIEDIDP 300
QY 301 DVLDSMHSIGCFRDNRNKLLODLISEENOEKMYIFLLIDRKERYPSODEDLPENNEIDP 360
DB 301 DVLDSMHSIGCFRDNRNKLLODLISEENOEKMYIFLLIDRKERYPSODEDLPENNEIDP 360
QY 361 PRKRYDSMLNRHGRPRERKSMYLVSTDGSPVPARAIEMAHGGRSSISGASSGL 420
DB 361 PRKRYDSMLNRHGRPRERKSMYLVSTDGSPVPARAIEMAHGGRSSISGASSGL 420
QY 421 STSPSSRYTPAPTPPKGTVPHTPKESPACTNPTPPSSPSVGVPMRARLINSIKNS 480
DB 421 STSPSSRYTPAPTPPKGTVPHTPKESPACTNPTPPSSPSVGVPMRARLINSIKNS 480

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QY 481 SIKNSFLGSPRRHRRKLVPTPEEMSNLTPESSPELAKKSMFGNFIISLEKEQIFVVIKD 540
DB 481 SIKNSFLGSPRRHRRKLVPTPEEMSNLTPESSPELAKKSMFGNFIISLEKEQIFVVIKD 540
QY 541 KPLSSIKADIYHAFSLISLSHSVTSQTSFRAEYKATGPAVFOQPVKFOVDITYTEGGE 600
DB 541 KPLSSIKADIYHAFSLISLSHSVTSQTSFRAEYKATGPAVFOQPVKFOVDITYTEGGE 600
QY 601 AOKENGIVSVPTTLTSGSPRRFRKRVETIQALSLTHDPPAAQHLSD 647
DB 601 AOKENGIVSVPTTLTSGSPRRFRKRVETIQALSLTHDPPAAQHLSD 647

```

## RESULT 7

```

US-09-842-582-2
; Sequence 2, Application US/09842582
; Patent No. US20020155570A1
; GENERAL INFORMATION:
; APPLICANT: Millennium Pharmaceuticals, Inc.
; APPLICANT: Meyers, Rachel
; TITLE OF INVENTION: 2246. NOVEL PROTEIN KINASE MOLECULES AND
; TITLE OF INVENTION: USES THEREFOR
; FILE REFERENCE: 38155-20054.00
; CURRENT APPLICATION NUMBER: US/09/842,582
; CURRENT FILING DATE: 2001-04-25
; PRIOR APPLICATION NUMBER: US 60/159,391
; PRIOR FILING DATE: 2000-04-25
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 674
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-842-582-2

```

Query Match 96.5%; Score 3374; DB 9; Length 674;

Best Local Similarity 99.7%; Pred. No. 7.9e-210;

Matches 645; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

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QY 1 MSTGKDGGAQHAQYVGYRLEKTLGKQTLGVKLGVCVTCQKVAIKIVNREKLSSEVL 60
DB 1 MSTGKDGGAQHAQYVGYRLEKTLGKQTLGVKLGVCVTCQKVAIKIVNREKLSSEVL 60
QY 61 MKVEREIALIKLIEHPVTLKLDVYENKRYLYLVLEHVSQGEIPDYLVKKGRLLTPKEARK 120
DB 61 MKVEREIALIKLIEHPVTLKLDVYENKRYLYLVLEHVSQGEIPDYLVKKGRLLTPKEARK 120
QY 121 FFRQIISALDFCHSHSICRDLKPENLIDPEKNIRIADFGMASLQVGSILLETSCGSPH 180
DB 121 FFRQIISALDFCHSHSICRDLKPENLIDPEKNIRIADFGMASLQVGSILLETSCGSPH 180
QY 121 FFRQIISALDFCHSHSICRDLKPENLIDPEKNIRIADFGMASLQVGSILLETSCGSPH 180
DB 121 FFRQIISALDFCHSHSICRDLKPENLIDPEKNIRIADFGMASLQVGSILLETSCGSPH 180
QY 181 YACPEVIRGEKXDDGRKADVMSGVILFALLVGALEPDDDNLRQLLEKXKRGVFMHPFIP 240
DB 181 YACPEVIRGEKXDDGRKADVMSGVILFALLVGALEPDDDNLRQLLEKXKRGVFMHPFIP 240
QY 241 PDCQSLIRGMEVDAARRLTLEHIQKHIWYIGKNEPEPEQPIPRKVOIRSLPSLEDIDP 300
DB 241 PDCQSLIRGMEVDAARRLTLEHIQKHIWYIGKNEPEPEQPIPRKVOIRSLPSLEDIDP 300
QY 241 PDCQSLIRGMEVDAARRLTLEHIQKHIWYIGKNEPEPEQPIPRKVOIRSLPSLEDIDP 300
DB 241 PDCQSLIRGMEVDAARRLTLEHIQKHIWYIGKNEPEPEQPIPRKVOIRSLPSLEDIDP 300
QY 301 DVLDSMHSIGCFRDRNKLQDLSEENQEKIYFLLDRKERYPSQEDDELPPRNEIDP 360
DB 301 DVLDSMHSIGCFRDRNKLQDLSEENQEKIYFLLDRKERYPSQEDDELPPRNEIDP 360
QY 361 PRKRVDSPMLNRHGKRRPERKSMETLSTVDGSPVPARRAIEAHOQGRSSISGASSGL 420
DB 361 PRKRVDSPMLNRHGKRRPERKSMETLSTVDGSPVPARRAIEAHOQGRSSISGASSGL 420
QY 421 STSPILSSPRVTPHPSRPGSLPTPKGTPVHTPKESPACTPPTPPSSPVGVGVPWRAALN 480
DB 421 STSPILSSPRVTPHPSRPGSLPTPKGTPVHTPKESPACTPPTPPSSPVGVGVPWRAALN 480
QY 481 SIKNSFLGSPRRHRRKLVPTPEEMSNLTPESSPELAKKSMFGNFIISLEKEQIFVVIKD 540
DB 481 SIKNSFLGSPRRHRRKLVPTPEEMSNLTPESSPELAKKSMFGNFIISLEKEQIFVVIKD 540

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DB 481 SIKNSFLGSPRRHRRKLVPTPEEMSNLTPESSPELAKKSMFGNFIISLEKEQIFVVIKD 540
QY 541 KPLSSIKADIYHAFSLISLSHSVTSQTSFRAEYKATGPAVFOQPVKFOVDITYTEGGE 600
DB 541 KPLSSIKADIYHAFSLISLSHSVTSQTSFRAEYKATGPAVFOQPVKFOVDITYTEGGE 600
QY 601 AOKENGIVSVPTTLTSGSPRRFRKRVETIQALSLTHDPPAAQHLSD 647
DB 601 AOKENGIVSVPTTLTSGSPRRFRKRVETIQALSLTHDPPAAQHLSD 647

```

## RESULT 8

```

US-10-283-247-7
; Sequence 7, Application US/10283247
; Publication No. US20030119037A1
; GENERAL INFORMATION:
; APPLICANT: NEELAM, Beena et al.
; TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
; TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: CL001304
; CURRENT APPLICATION NUMBER: US/10/283,247
; CURRENT FILING DATE: 2002-10-30
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 674
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-283-247-7

```

Query Match 96.5%; Score 3374; DB 14; Length 674;

Best Local Similarity 99.7%; Pred. No. 7.9e-210;

Matches 645; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

QY 1 MSTGKDGGAQHAQYVGYRLEKTLGKQTLGVKLGVCVTCQKVAIKIVNREKLSSEVL 60
DB 1 MSTGKDGGAQHAQYVGYRLEKTLGKQTLGVKLGVCVTCQKVAIKIVNREKLSSEVL 60
QY 61 MKVEREIALIKLIEHPVTLKLDVYENKRYLYLVLEHVSQGEIPDYLVKKGRLLTPKEARK 120
DB 61 MKVEREIALIKLIEHPVTLKLDVYENKRYLYLVLEHVSQGEIPDYLVKKGRLLTPKEARK 120
QY 121 FFRQIISALDFCHSHSICRDLKPENLIDPEKNIRIADFGMASLQVGSILLETSCGSPH 180
DB 121 FFRQIISALDFCHSHSICRDLKPENLIDPEKNIRIADFGMASLQVGSILLETSCGSPH 180
QY 181 YACPEVIRGEKXDDGRKADVMSGVILFALLVGALEPDDDNLRQLLEKXKRGVFMHPFIP 240
DB 181 YACPEVIRGEKXDDGRKADVMSGVILFALLVGALEPDDDNLRQLLEKXKRGVFMHPFIP 240
QY 241 PDCQSLIRGMEVDAARRLTLEHIQKHIWYIGKNEPEPEQPIPRKVOIRSLPSLEDIDP 300
DB 241 PDCQSLIRGMEVDAARRLTLEHIQKHIWYIGKNEPEPEQPIPRKVOIRSLPSLEDIDP 300
QY 241 PDCQSLIRGMEVDAARRLTLEHIQKHIWYIGKNEPEPEQPIPRKVOIRSLPSLEDIDP 300
DB 241 PDCQSLIRGMEVDAARRLTLEHIQKHIWYIGKNEPEPEQPIPRKVOIRSLPSLEDIDP 300
QY 301 DVLDSMHSIGCFRDRNKLQDLSEENQEKIYFLLDRKERYPSQEDDELPPRNEIDP 360
DB 301 DVLDSMHSIGCFRDRNKLQDLSEENQEKIYFLLDRKERYPSQEDDELPPRNEIDP 360
QY 361 PRKRVDSPMLNRHGKRRPERKSMETLSTVDGSPVPARRAIEAHOQGRSSISGASSGL 420
DB 361 PRKRVDSPMLNRHGKRRPERKSMETLSTVDGSPVPARRAIEAHOQGRSSISGASSGL 420
QY 421 STSPILSSPRVTPHPSRPGSLPTPKGTPVHTPKESPACTPPTPPSSPVGVGVPWRAALN 480
DB 421 STSPILSSPRVTPHPSRPGSLPTPKGTPVHTPKESPACTPPTPPSSPVGVGVPWRAALN 480
QY 481 SIKNSFLGSPRRHRRKLVPTPEEMSNLTPESSPELAKKSMFGNFIISLEKEQIFVVIKD 540
DB 481 SIKNSFLGSPRRHRRKLVPTPEEMSNLTPESSPELAKKSMFGNFIISLEKEQIFVVIKD 540
QY 541 KPLSSIKADIYHAFSLISLSHSVTSQTSFRAEYKATGPAVFOQPVKFOVDITYTEGGE 600
DB 541 KPLSSIKADIYHAFSLISLSHSVTSQTSFRAEYKATGPAVFOQPVKFOVDITYTEGGE 600

```

Db 541 KPSSIKADIVAAFLIPSLSHSVISQTFRAEYKATGGPAVFOQVKNQVDTITTEGE 600  
QY 601 AQKENGISYVTFLLSGPSRRFRKRVETIQAQLLSTHDPAAQHLS 647  
Db 601 AQKENGISYVTFLLSGPSRRFRKRVETIQAQLLSTHDPAAQHLS 647

RESULT 9  
US-10-283-247-8  
; Sequence 8, Application US/10283247  
; Publication No. US20030119037A1  
; GENERAL INFORMATION:  
; APPLICANT: NEEHAM, Beena et al.  
; TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC  
; TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES  
; TITLE OF INVENTION: THEREOF  
; FILE REFERENCE: CL001304  
; CURRENT APPLICATION NUMBER: US/10/283,247  
; CURRENT FILING DATE: 2002-10-30  
; NUMBER OF SEQ ID NOS: 10  
; SOFTWARE: PasteSeq for Windows Version 4.0  
; SEQ ID NO 8  
; LENGTH: 674  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-283-247-8

Query Match 96.5%; Score 3374; DB 14; Length 674;  
Best Local Similarity 99.7%; Pred. No. 7, 9e-210;  
Matches 645; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 MTSTGKGGAQHQAQVYPRLEKTLGKGTGLVAGVHCVTQKVAIKIVNREKLSSEVL 60  
Db 1 MTSTGKGGAQHQAQVYPRLEKTLGKGTGLVAGVHCVTQKVAIKIVNREKLSSEVL 60  
QY 61 MKYERETAILKLEHPIVHLKLDHYENKLYLVLEHVSQGLFDVLYVKKGRITPGEAK 120  
Db 61 MKYERETAILKLEHPIVHLKLDHYENKLYLVLEHVSQGLFDVLYVKKGRITPGEAK 120  
QY 121 FFRQIISALDFCHSHSICHRDLKPEMLLDKNNIRIADFGMAILOVGDLSLETSCGSPH 180  
Db 121 FFRQIISALDFCHSHSICHRDLKPEMLLDKNNIRIADFGMAILOVGDLSLETSCGSPH 180  
QY 121 FFRQIISALDFCHSHSICHRDLKPEMLLDKNNIRIADFGMAILOVGDLSLETSCGSPH 180  
Db 121 FFRQIISALDFCHSHSICHRDLKPEMLLDKNNIRIADFGMAILOVGDLSLETSCGSPH 180  
QY 181 YACEVTRGEXYDGRKADVWSCGYILFALLVGAIPDDDLRLQLLEKVRGVMHMFIP 240  
Db 181 YACEVTRGEXYDGRKADVWSCGYILFALLVGAIPDDDLRLQLLEKVRGVMHMFIP 240  
QY 181 YACEVTRGEXYDGRKADVWSCGYILFALLVGAIPDDDLRLQLLEKVRGVMHMFIP 240  
Db 181 YACEVTRGEXYDGRKADVWSCGYILFALLVGAIPDDDLRLQLLEKVRGVMHMFIP 240  
QY 241 PDCOSILRGMEVDAARLTLEHIQKAIWYIGKNEPEPEQPIPRKVOIRSLPSLEIDIP 300  
Db 241 PDCOSILRGMEVDAARLTLEHIQKAIWYIGKNEPEPEQPIPRKVOIRSLPSLEIDIP 300  
QY 241 PDCOSILRGMEVDAARLTLEHIQKAIWYIGKNEPEPEQPIPRKVOIRSLPSLEIDIP 300  
Db 241 PDCOSILRGMEVDAARLTLEHIQKAIWYIGKNEPEPEQPIPRKVOIRSLPSLEIDIP 300  
QY 301 DVLDSMHSILGCFDRNKLLOLLSEENOEKMIYFLLDRKERPSQEDDLPRNEIDIP 360  
Db 301 DVLDSMHSILGCFDRNKLLOLLSEENOEKMIYFLLDRKERPSQEDDLPRNEIDIP 360  
QY 301 DVLDSMHSILGCFDRNKLLOLLSEENOEKMIYFLLDRKERPSQEDDLPRNEIDIP 360  
Db 301 DVLDSMHSILGCFDRNKLLOLLSEENOEKMIYFLLDRKERPSQEDDLPRNEIDIP 360  
QY 361 PRKVDSPMLNRHAKRRPERKSMVLSVTGGSPVPARAIEMAQHQRSRISGASSGL 420  
Db 361 PRKVDSPMLNRHAKRRPERKSMVLSVTGGSPVPARAIEMAQHQRSRISGASSGL 420  
QY 361 PRKVDSPMLNRHAKRRPERKSMVLSVTGGSPVPARAIEMAQHQRSRISGASSGL 420  
Db 361 PRKVDSPMLNRHAKRRPERKSMVLSVTGGSPVPARAIEMAQHQRSRISGASSGL 420  
QY 421 STPLSPSRVTPHSPSPGSLPTPKGTPTVHTPKESPAGTNPPTPSSPSVGVPMARLN 480  
Db 421 STPLSPSRVTPHSPSPGSLPTPKGTPTVHTPKESPAGTNPPTPSSPSVGVPMARLN 480  
QY 421 STPLSPSRVTPHSPSPGSLPTPKGTPTVHTPKESPAGTNPPTPSSPSVGVPMARLN 480  
Db 421 STPLSPSRVTPHSPSPGSLPTPKGTPTVHTPKESPAGTNPPTPSSPSVGVPMARLN 480  
QY 481 SIKNSFLGSPRRHRKQVPTPEEMSNLTPESSPELAKKSMFGNFIISLEKEBOIFVYIKD 540  
Db 481 SIKNSFLGSPRRHRKQVPTPEEMSNLTPESSPELAKKSMFGNFIISLEKEBOIFVYIKD 540  
QY 481 SIKNSFLGSPRRHRKQVPTPEEMSNLTPESSPELAKKSMFGNFIISLEKEBOIFVYIKD 540  
Db 481 SIKNSFLGSPRRHRKQVPTPEEMSNLTPESSPELAKKSMFGNFIISLEKEBOIFVYIKD 540  
QY 541 KPLSSIKADIVAAFLIPSLSHSVISQTFRAEYKATGGPAVFOQVKNQVDTITTEGE 600  
Db 541 KPLSSIKADIVAAFLIPSLSHSVISQTFRAEYKATGGPAVFOQVKNQVDTITTEGE 600  
QY 541 KPLSSIKADIVAAFLIPSLSHSVISQTFRAEYKATGGPAVFOQVKNQVDTITTEGE 600  
Db 541 KPLSSIKADIVAAFLIPSLSHSVISQTFRAEYKATGGPAVFOQVKNQVDTITTEGE 600  
QY 601 AQKENGISYVTFLLSGPSRRFRKRVETIQAQLLSTHDPAAQHLS 647  
Db 601 AQKENGISYVTFLLSGPSRRFRKRVETIQAQLLSTHDPAAQHLS 647

Db 601 AQKENGISYVTFLLSGPSRRFRKRVETIQAQLLSTHDPAAQHLS 647

RESULT 10  
US-10-425-114-54467  
; Sequence 54467, Application US/10425114  
; Publication No. US20040034888A1  
; GENERAL INFORMATION:  
; APPLICANT: Liu, Jingdong  
; APPLICANT: Zhou, Yihua  
; APPLICANT: Kovalic, David K.  
; APPLICANT: Screen, Steven E  
; APPLICANT: Tabaka, Jack E  
; APPLICANT: Cao, Yongwei  
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with  
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
; FILE REFERENCE: 38-21(5313)B  
; CURRENT APPLICATION NUMBER: US/10/425,114  
; CURRENT FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 73128  
; SEQ ID NO 54467  
; LENGTH: 688  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; OTHER INFORMATION: Clone ID: LIB4651-024-E4\_FLI.pep  
US-10-425-114-54467

Query Match 91.5%; Score 3200; DB 12; Length 688;  
Best Local Similarity 96.1%; Pred. No. 1, 4e-198;  
Matches 616; Conservative 2; Mismatches 1; Indels 22; Gaps 1;

QY 29 QTGLVKGVCNVTQKVAIKIVNREKLSSEVIMKVEREIAIKLIEHPVHLKLDHYENK 88  
Db 21 RAGLVKGVHCVTQKVAIKIVNREKLSSEVIMKVEREIAIKLIEHPVHLKLDHYENK 80  
QY 89 KYLVLEHVSQGLFDVLYVKKGRITPGEAKRFRQIISALDFCHSHSICHRDLKPEML 148  
Db 81 KYLVLEHVSQGLFDVLYVKKGRITPGEAKRFRQIISALDFCHSHSICHRDLKPEML 140  
QY 149 LDEKNNIRIADFGMAILOVGDLSLETSCGSPHVAIPEVITGEXYDGRKADVWSCGYILFA 208  
Db 141 LDEKNNIRIADFGMAILOVGDLSLETSCGSPHVAIPEVITGEXYDGRKADVWSCGYILFA 200  
QY 209 LLVGALPPDDDLRLQLLEKVRGVMHMFIPDPQOSILRGMEVDAARLTLEHIQKI 268  
Db 201 LLVGALPPDDDLRLQLLEKVRGVMHMFIPDPQOSILRGMEVDAARLTLEHIQKI 260  
QY 269 WYIGKNEPEPEQPIPRKVOIRSLPSLEIDIPDVLDSHSLGCFDRNKLLOLLSEEN 328  
Db 261 WYIGKNEPEPEQPIPRKVOIRSLPSLEIDIPDVLDSHSLGCFDRNKLLOLLSEEN 320  
QY 329 QEKMIYFLLDRKERPSQEDDLPRNEIDIPPRKVDSPMLNRHAKRRPERKSMVLSV 388  
Db 321 QEKMIYFLLDRKERPSQEDDLPRNEIDIPPRKVDSPMLNRHAKRRPERKSMVLSV 380  
QY 389 TDGSPVPARAIEMAQHQR-----RRSISGASSGLSTPLS 426  
Db 381 TDGSPVPARAIEMAQHQRKAMFSKLDIAEAHPQSKEDRSRISGASSGLSTPLS 440  
QY 427 SPRVTPHSPSPGSLPTPKGTPTVHTPKESPAGTNPPTPSSPSVGVPMARLNSIKNSF 486  
Db 441 SPRVTPHSPSPGSLPTPKGTPTVHTPKESPAGTNPPTPSSPSVGVPMARLNSIKNSF 500  
QY 487 LGSPPRRHRKQVPTPEEMSNLTPESSPELAKKSMFGNFIISLEKEBOIFVYIKDPLSSI 546  
Db 501 LGSPPRRHRKQVPTPEEMSNLTPESSPELAKKSMFGNFIISLEKEBOIFVYIKDPLSSI 560  
QY 547 KADIYVAFLSLPSLSHVSISQTFRAEYKATGGPAVFOQVKNQVDTITTEGGAQKENG 606  
Db 561 KADIYVAFLSLPSLSHVSISQTFRAEYKATGGPAVFOQVKNQVDTITTEGGAQKENG 620

QY 607 IYVTFLLSGPSRRFRKRVETIOAQLSTHDPAAQHLSD 647  
 DB 621 IYVTFLLSGPSRRFRKRVETIOAQLSTHDPAAQHLSE 661

## RESULT 11

US-10-054-579-4  
 ; Sequence 4, Application US/10054579  
 ; Publication No. US20020137913A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Turner, C. Alexander Jr.  
 ; APPLICANT: Mathur, Brian  
 ; TITLE OF INVENTION: No. US20020137913A1 Human Kinases and Polynucleotides Encoding  
 ; FILE REFERENCE: LEX-0300-USA  
 ; CURRENT APPLICATION NUMBER: US/10/054,579  
 ; PRIOR FILING DATE: 2002-01-22  
 ; PRIOR APPLICATION NUMBER: US 60/263,378  
 ; PRIOR FILING DATE: 2001-01-23  
 ; NUMBER OF SEQ ID NOS: 4  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 4  
 ; LENGTH: 608  
 ; TYPE: PRF  
 ; ORGANISM: homo sapiens  
 US-10-054-579-4

Query Match 91.2%; Score 3188; DB 13; Length 608;  
 Best Local Similarity 100.0%; Pred. No. 7,4e-198;  
 Matches 608; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 61 MKVEREIALIKLIEHPVHLKLDHYENKCYLYLVLEHVSGBELPDYLVKKGRLTPKEARK 120  
 DB 1 MKVEREIALIKLIEHPVHLKLDHYENKCYLYLVLEHVSGBELPDYLVKKGRLTPKEARK 60  
 QY 121 FFRQIISALDFCHSHSICRDLKPEKNNIRIADFGMASIQVDSILLETSCGSPH 180  
 DB 61 FFRQIISALDFCHSHSICRDLKPEKNNIRIADFGMASIQVDSILLETSCGSPH 120  
 QY 181 YACPEVIRGEXYDGRKADVMSCGVILFALLVGALEPDDNLRQLLEKVRGVFHMHPFIP 240  
 DB 121 YACPEVIRGEXYDGRKADVMSCGVILFALLVGALEPDDNLRQLLEKVRGVFHMHPFIP 180  
 QY 241 PDCOSILRGMIENVDAARLTLEHIQKHIWYIGKNEPEPEQPIPRKVOIRSLPSEIDIP 300  
 DB 181 PDCOSILRGMIENVDAARLTLEHIQKHIWYIGKNEPEPEQPIPRKVOIRSLPSEIDIP 240  
 QY 301 DVLDSMHSIGCFRDRNKLQDLSEBENQEKMIYFLIDRKERYPSQEDDELPRNEIDIP 360  
 DB 241 DVLDSMHSIGCFRDRNKLQDLSEBENQEKMIYFLIDRKERYPSQEDDELPRNEIDIP 300  
 QY 361 PRKRVDSFMLNRHGRKRPERSKMEVLSVTDGSPVPARRAIEMAOHGORSISGASGL 420  
 DB 301 PRKRVDSFMLNRHGRKRPERSKMEVLSVTDGSPVPARRAIEMAOHGORSISGASGL 360  
 QY 421 STSPILSPRVTPHSPRSGPLPTPKGTPTVTPKESPAAGTNPPTPSSPSVGVGVPWRAARN 480  
 DB 361 STSPILSPRVTPHSPRSGPLPTPKGTPTVTPKESPAAGTNPPTPSSPSVGVGVPWRAARN 420  
 QY 481 SIKNSFLSGPFRFRKRLQVTPPEMSNLTPESSPELAKKSWFGNFIISKEKEQIFVVIKD 540  
 DB 421 SIKNSFLSGPFRFRKRLQVTPPEMSNLTPESSPELAKKSWFGNFIISKEKEQIFVVIKD 480  
 QY 541 KPLSISIKADIYHAFILSPISLSHVSISQTSFRAEYKATGGPAVFOKPVKQVQDITTYTGE 600  
 DB 481 KPLSISIKADIYHAFILSPISLSHVSISQTSFRAEYKATGGPAVFOKPVKQVQDITTYTGE 540  
 QY 601 AOKENGISYVTFLLSGPSRRFRKRVETIOAQLSTHDPAAQHLSDITNCMEMMTGRSL 660  
 DB 541 AOKENGISYVTFLLSGPSRRFRKRVETIOAQLSTHDPAAQHLSDITNCMEMMTGRSL 600  
 QY 661 KCGIIPKS 668  
 DB 601 KCGIIPKS 608

## RESULT 12

US-10-283-247-9  
 ; Sequence 9, Application US/10283247  
 ; Publication No. US20030119037A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: NEELAM, Beena et al.  
 ; TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC  
 ; TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES  
 ; FILE REFERENCE: CLO01304  
 ; CURRENT APPLICATION NUMBER: US/10/283,247  
 ; PRIOR FILING DATE: 2002-10-30  
 ; NUMBER OF SEQ ID NOS: 10  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 9  
 ; LENGTH: 614  
 ; TYPE: PRF  
 ; ORGANISM: Homo sapiens  
 US-10-283-247-9

Query Match 87.6%; Score 3065; DB 14; Length 614;  
 Best Local Similarity 99.7%; Pred. No. 6.8e-190;  
 Matches 585; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 61 MKVEREIALIKLIEHPVHLKLDHYENKCYLYLVLEHVSGBELPDYLVKKGRLTPKEARK 120  
 DB 1 MKVEREIALIKLIEHPVHLKLDHYENKCYLYLVLEHVSGBELPDYLVKKGRLTPKEARK 60  
 QY 121 FFRQIISALDFCHSHSICRDLKPEKNNIRIADFGMASIQVDSILLETSCGSPH 180  
 DB 61 FFRQIISALDFCHSHSICRDLKPEKNNIRIADFGMASIQVDSILLETSCGSPH 120  
 QY 181 YACPEVIRGEXYDGRKADVMSCGVILFALLVGALEPDDNLRQLLEKVRGVFHMHPFIP 240  
 DB 121 YACPEVIRGEXYDGRKADVMSCGVILFALLVGALEPDDNLRQLLEKVRGVFHMHPFIP 180  
 QY 241 PDCOSILRGMIENVDAARLTLEHIQKHIWYIGKNEPEPEQPIPRKVOIRSLPSEIDIP 300  
 DB 181 PDCOSILRGMIENVDAARLTLEHIQKHIWYIGKNEPEPEQPIPRKVOIRSLPSEIDIP 240  
 QY 301 DVLDSMHSIGCFRDRNKLQDLSEBENQEKMIYFLIDRKERYPSQEDDELPRNEIDIP 360  
 DB 241 DVLDSMHSIGCFRDRNKLQDLSEBENQEKMIYFLIDRKERYPSQEDDELPRNEIDIP 300  
 QY 361 PRKRVDSFMLNRHGRKRPERSKMEVLSVTDGSPVPARRAIEMAOHGORSISGASGL 420  
 DB 301 PRKRVDSFMLNRHGRKRPERSKMEVLSVTDGSPVPARRAIEMAOHGORSISGASGL 360  
 QY 421 STSPILSPRVTPHSPRSGPLPTPKGTPTVTPKESPAAGTNPPTPSSPSVGVGVPWRAARN 480  
 DB 361 STSPILSPRVTPHSPRSGPLPTPKGTPTVTPKESPAAGTNPPTPSSPSVGVGVPWRAARN 420  
 QY 481 SIKNSFLSGPFRFRKRLQVTPPEMSNLTPESSPELAKKSWFGNFIISKEKEQIFVVIKD 540  
 DB 421 SIKNSFLSGPFRFRKRLQVTPPEMSNLTPESSPELAKKSWFGNFIISKEKEQIFVVIKD 480  
 QY 541 KPLSISIKADIYHAFILSPISLSHVSISQTSFRAEYKATGGPAVFOKPVKQVQDITTYTGE 600  
 DB 481 KPLSISIKADIYHAFILSPISLSHVSISQTSFRAEYKATGGPAVFOKPVKQVQDITTYTGE 540  
 QY 601 AOKENGISYVTFLLSGPSRRFRKRVETIOAQLSTHDPAAQHLSD 647  
 DB 541 AOKENGISYVTFLLSGPSRRFRKRVETIOAQLSTHDPAAQHLSE 587

## RESULT 13

US-10-283-247-10  
 ; Sequence 10, Application US/10283247  
 ; Publication No. US20030119037A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: NEELAM, Beena et al.

```

; TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
; TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
; TITLE OF INVENTION: THERESOP
; FILE REFERENCE: CLO01304
; CURRENT APPLICATION NUMBER: US/10/283,247
; CURRENT FILING DATE: 2002-10-30
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 614
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-283-247-10

```

```

Query Match      87.6%; Score 3065; DB 14; Length 614;
Best Local Similarity 99.7%; Pred. No. 6,86-130;
Matches 565; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

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```

QY 61 MKVEREIAIKLIEHPVLKLDHYENKKYLYLLEHVSQGLFDYLVKKGRITPEAKR 120
DB 1 MKVEREIAIKLIEHPVLKLDHYENKKYLYLLEHVSQGLFDYLVKKGRITPEAKR 60
QY 121 FFRQIISALDFCHSHSICRDLKPENLIDKKNIRIADFGMASLOVGSLSLETSCGSPH 180
DB 61 FFRQIISALDFCHSHSICRDLKPENLIDKKNIRIADFGMASLOVGSLSLETSCGSPH 120
QY 181 YACPEVIRGEKYGKADVWSCGVILPALLVGLPDDNNLRQLLEKRGVFNHMFIP 240
DB 121 YACPEVIRGEKYGKADVWSCGVILPALLVGLPDDNNLRQLLEKRGVFNHMFIP 180
QY 241 PDCQSLRGMI EVDAAARLTLEHIQKHWTYIGKNEPEPEOPIPRKVQIRSLPSLEDIDP 300
DB 181 PDCQSLRGMI EVDAAARLTLEHIQKHWTYIGKNEPEPEOPIPRKVQIRSLPSLEDIDP 240
QY 301 DVLDSMHSICGFRDNRNKLQDLISEENOEKMTYFLLDRKERYPSQEDIDLPPRNEIDP 360
DB 241 DVLDSMHSICGFRDNRNKLQDLISEENOEKMTYFLLDRKERYPSQEDIDLPPRNEIDP 300
QY 361 PAKRVDSPMLNRHGRKRPERSKMEVLSYTDGSPVAPARAIEMAHQGQSRISGASSGI 420
DB 301 PAKRVDSPMLNRHGRKRPERSKMEVLSYTDGSPVAPARAIEMAHQGQSRISGASSGI 360
QY 421 STSPSSPRVTPHPSRPGSPLPPTKGTVPHTPKESPAGTNPPTPSSPSVGVPMARIN 480
DB 361 STSPSSPRVTPHPSRPGSPLPPTKGTVPHTPKESPAGTNPPTPSSPSVGVPMARIN 420
QY 481 STKNSFLGSPRFRHKKLOVPTPEEMSNLTPESSPELAKKSPGNFISLEKEEQIFVYID 540
DB 421 STKNSFLGSPRFRHKKLOVPTPEEMSNLTPESSPELAKKSPGNFISLEKEEQIFVYID 480
QY 541 KPLSSIKADIYHAFISLPSLSHVSISQTSFRAEKYKATGPAVFOKPVKQVDITTEGGE 600
DB 481 KPLSSIKADIYHAFISLPSLSHVSISQTSFRAEKYKATGPAVFOKPVKQVDITTEGGE 540
QY 601 AOKENGIVSYFTLLSGPSRFRKRVETIOAQLLSTHDPAAQHLS 647
DB 541 AOKENGIVSYFTLLSGPSRFRKRVETIOAQLLSTHDPAAQHLS 587

```

```

RESULT 14
US-10-283-247-5
; Sequence 5, Application US/10283247
; Publication No. US20030119037A1
; GENERAL INFORMATION:
; APPLICANT: NEBLAM, Beena et al.
; TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
; TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
; FILE REFERENCE: CLO01304
; CURRENT APPLICATION NUMBER: US/10/283,247
; CURRENT FILING DATE: 2002-10-30
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: FastSeq for Windows Version 4.0

```

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; SEQ ID NO 5
; LENGTH: 636
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-283-247-5

```

```

Query Match      87.2%; Score 3050; DB 14; Length 636;
Best Local Similarity 96.2%; Pred. No. 6,66-189;
Matches 586; Conservative 1; Mismatches 0; Indels 22; Gaps 1;

```

```

QY 61 MKVEREIAIKLIEHPVLKLDHYENKKYLYLLEHVSQGLFDYLVKKGRITPEAKR 120
DB 1 MKVEREIAIKLIEHPVLKLDHYENKKYLYLLEHVSQGLFDYLVKKGRITPEAKR 60
QY 121 FFRQIISALDFCHSHSICRDLKPENLIDKKNIRIADFGMASLOVGSLSLETSCGSPH 180
DB 61 FFRQIISALDFCHSHSICRDLKPENLIDKKNIRIADFGMASLOVGSLSLETSCGSPH 120
QY 181 YACPEVIRGEKYGKADVWSCGVILPALLVGLPDDNNLRQLLEKRGVFNHMFIP 240
DB 121 YACPEVIRGEKYGKADVWSCGVILPALLVGLPDDNNLRQLLEKRGVFNHMFIP 180
QY 241 PDCQSLRGMI EVDAAARLTLEHIQKHWTYIGKNEPEPEOPIPRKVQIRSLPSLEDIDP 300
DB 181 PDCQSLRGMI EVDAAARLTLEHIQKHWTYIGKNEPEPEOPIPRKVQIRSLPSLEDIDP 240
QY 301 DVLDSMHSICGFRDNRNKLQDLISEENOEKMTYFLLDRKERYPSQEDIDLPPRNEIDP 360
DB 241 DVLDSMHSICGFRDNRNKLQDLISEENOEKMTYFLLDRKERYPSQEDIDLPPRNEIDP 300
QY 361 PAKRVDSPMLNRHGRKRPERSKMEVLSYTDGSPVAPARAIEMAHQGQSRISGASSGI 420
DB 301 PAKRVDSPMLNRHGRKRPERSKMEVLSYTDGSPVAPARAIEMAHQGQSRISGASSGI 360
QY 409 -----RSRSISGASGSLSTSPSSPRVTPHPSRPGSPLPPTKGTVPHTPKESPAG 458
DB 361 EAHPOFSEKEDRSRSISGASGSLSTSPSSPRVTPHPSRPGSPLPPTKGTVPHTPKESPAG 420
QY 459 TPNTPTSPSSPSVGVPMARINIKNSFLGSPRFRHKKLOVPTPEEMSNLTPESSPELAK 518
DB 421 TPNTPTSPSSPSVGVPMARINIKNSFLGSPRFRHKKLOVPTPEEMSNLTPESSPELAK 480
QY 519 KSWGNFISLEKEEQIFVYIDKPLSSIKADIYHAFISLPSLSHVSISQTSFRAEKYKATG 578
DB 481 KSWGNFISLEKEEQIFVYIDKPLSSIKADIYHAFISLPSLSHVSISQTSFRAEKYKATG 540
QY 579 GPAVFOKPVKQVDITTEGGEAOKENGIVSYFTLLSGPSRFRKRVETIOAQLLSTHDP 638
DB 541 GPAVFOKPVKQVDITTEGGEAOKENGIVSYFTLLSGPSRFRKRVETIOAQLLSTHDP 600
QY 639 PPAQHLS 647
DB 601 PPAQHLS 609

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RESULT 15
US-10-195-072-4
; Sequence 4, Application US/10195072
; Publication No. US20030092036A1
; GENERAL INFORMATION:
; APPLICANT: Origene Technologies
; TITLE OF INVENTION: Full-length Serine Protein Kinase in Brain and Pancreas
; FILE REFERENCE: 16U 101 C2
; CURRENT APPLICATION NUMBER: US/10/195,072
; CURRENT FILING DATE: 2002-07-15
; PRIOR APPLICATION NUMBER: US 09/930,181
; PRIOR FILING DATE: 2001-08-16
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 4
; LENGTH: 585
; TYPE: PRT
; ORGANISM: Homo sapiens

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US-10-195-072-4

Query Match	86.6%;	Score 3028;	DB 14;	Length 585;
Best Local Similarity	100.0%;	Pred. No. 1.6e-187;		
Matches 577;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0

QY	92	YLVLEHVSQGELELDYLVKKGRLLTPKARPEFQIISALDFGSHSICHRDJKPENLLDE	151
Db	9	YLVLEHVSQGELELDYLVKKGRLLTPKARPEFQIISALDFGSHSICHRDJKPENLLDE	68
QY	152	KNNIRIADFGMASLQVDSILLETSCGSPHYACPEYIRGEYDKGRADWSCGVILFALLV	211
Db	69	KNNIRIADFGMASLQVDSILLETSCGSPHYACPEYIRGEYDKGRADWSCGVILFALLV	128
QY	212	GALPFDNDNIROLLEKVKRQVFMHPFIIPDDQSLRGIEVDARLITLHIOKHWI	271
Db	129	GALPFDNDNIROLLEKVKRQVFMHPFIIPDDQSLRGIEVDARLITLHIOKHWI	188
QY	272	GCKNEPEPEOPIPRKQIOLSPLELIEDVDVLSNHSIGCFPRDKLLQDLISEENQEK	331
Db	189	GCKNEPEPEOPIPRKQIOLSPLELIEDVDVLSNHSIGCFPRDKLLQDLISEENQEK	248
QY	332	MIYFLILDRKERYPSOEDELDPEPRNEIDPEPRKVDSPMLNRGKRRPERKSMETLSTDG	391
Db	249	MIYFLILDRKERYPSOEDELDPEPRNEIDPEPRKVDSPMLNRGKRRPERKSMETLSTDG	308
QY	392	GSEVPARRALEMAHQGCRSISGASGISTPILSPRYTPHPSPRGSELPYGTIVHT	451
Db	309	GSEVPARRALEMAHQGCRSISGASGISTPILSPRYTPHPSPRGSELPYGTIVHT	368
QY	452	PKEPSAGTPPPTPPSSPSYGVPMWARRLINSINSLGSPRTHRRLOVPTPEEKSNTLPE	511
Db	369	PKEPSAGTPPPTPPSSPSYGVPMWARRLINSINSLGSPRTHRRLOVPTPEEKSNTLPE	428
QY	512	SSEPLAKKSNFGNFIILEXEEOQFVYIKXKPLSSIKADIVHAFILSPILSHSVISQTSFR	571
Db	429	SSEPLAKKSNFGNFIILEXEEOQFVYIKXKPLSSIKADIVHAFILSPILSHSVISQTSFR	488
QY	572	AEFKATAGGPAVFOKPYKFOVDITYTEGGEAQKENGIVSVTTLTSLGSPRRKRVETIOA	631
Db	489	AEFKATAGGPAVFOKPYKFOVDITYTEGGEAQKENGIVSVTTLTSLGSPRRKRVETIOA	548
QY	632	QLLSTHDPAAOHLSDTTNCEMMNRGSLSKGIIIPKS	668
Db	549	QLLSTHDPAAOHLSDTTNCEMMNRGSLSKGIIIPKS	585

Search completed: July 29, 2004, 10:32:11  
Job time : 51 secs

